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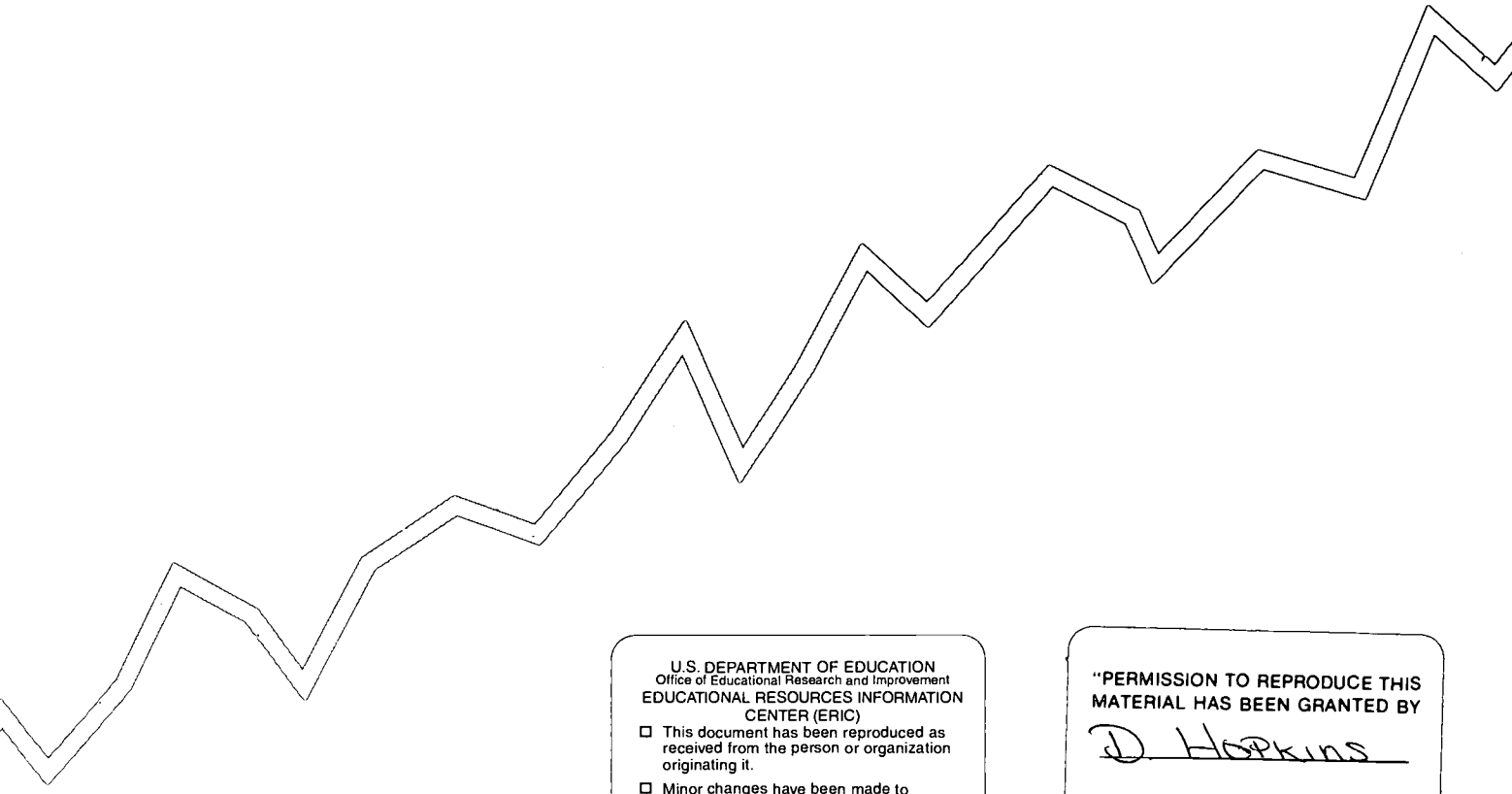
ABSTRACT

Suicide is the second leading cause of death in the 10- to 19-year-old population in Oregon. The suicide rate has increased more than five-fold in the last three and one-half decades. This trend can be reversed by developing an understanding of the characteristics, behaviors, and events associated with suicide in at-risk youth. The Youth Risk Behavior Survey (YRBS) is one tool available to identify suicidal ideation and behavior. Fifty high schools were randomly selected to participate in the survey. This report describes demographic, environmental, and behavioral characteristics associated with suicide attempts. Survey results determined that suicide is a persistent problem among Oregon's youth. Among those who attempt suicide, there is a spectrum of desires, from cries for help to death. Many youth are ambivalent about ending their lives, and would rather live if a solution could be found. There is a continuum of self-destructiveness that can be measured in adolescents, and these behaviors and characteristics relate to premature adult mortality. The best individual behavioral characteristics for identifying high school students at risk of making suicide attempts are injection drug use, frequent use of inhalants, tobacco or cocaine, and multiple pregnancies. Appendixes include: (1) acknowledgement of participating schools; (2) YRBS questionnaire; (3) risky behavior and the home environment; (4) statistics of suicide attempts and deaths, 1994-1996; and (5) school-based health centers. Ways to help prevent teen suicide and limitations of this study are discussed. (Contains 68 references, 13 figures, and 12 tables.) (JDM)

Suicidal Behavior

A Survey of Oregon High School Students, 1997



Center for Health Statistics
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SUICIDAL BEHAVIOR

A Survey of Oregon High School Students, 1997

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INTRODUCTION

I hate the world today. I feel so old inside. The tree of death is near, I don't know what to feel. The end is soon. I can't tell my parents, teachers, or friends. It's getting worse. Please help me.

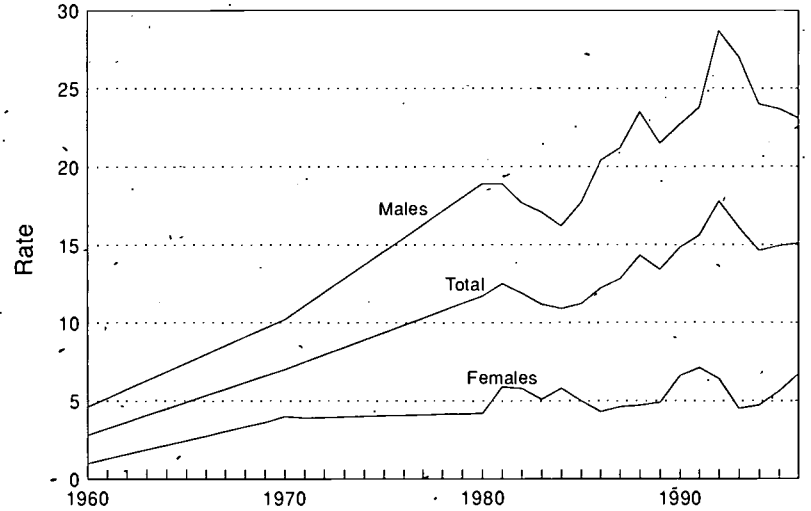
—statement by an Oregon student

During 1994-96, at least 97 Oregon youth 10 to 19 years old committed suicide; the youngest were two 10 year old boys who hanged themselves.[1] Suicide is the second leading cause of death of 10-19 year old Oregonians. (Unintentional injuries ranked first.[2]) In three and one-half decades, the suicide rate among the state's youth has increased more than five-fold. Between the periods 1959-61 and 1994-96, the suicide death rate for 15- to 19-year-olds soared from 2.8 to 15.1 per 100,000 population (Figure 1).[3,4] Oregon's suicide rate for 15- to 19-year-olds was 29% higher than the nation's during 1993-95 and ranked 17th highest among the states.[5]

Through self-inflicted gunshot wounds, and other injuries, almost 100 Oregon youth committed suicide in just three years.

If this trend is to be reversed, it is essential to develop an understanding of characteristics, behaviors, and events associated with youth suicide -- factors that can be used to

Figure 1. Suicide Rates for 15- to 19-Year-olds, 1959-61, 1969-71, 1979-81, and Three-year Moving Averages, 1981-96, Oregon Residents



Note: Because population data by age and sex are not available for the 1960s and 1970s, rates for these years, other than those based on decennial census data, have been interpolated. Therefore, variations within 10-year periods prior to 1980 are not apparent. Rates are per 100,000 population for the groups at risk.

identify at-risk youth. One available tool is the 1997 Youth Risk Behavior Survey (YRBS). The survey included three questions regarding suicidal ideation and behavior:

1. During the past 12 months, did you ever seriously consider attempting suicide?

2. During the past 12 months, how many times did you actually attempt suicide?

3. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

This report focuses on the students who said they actually attempted suicide.

A caveat: Recent research has shown that only a small proportion of survey respondents who report having attempted suicide actually have taken substantive action to injure themselves.[6] Some students use a liberal definition of "suicide attempt" mistaking vivid ideation for an attempt.[7]

HIGHLIGHTS

Deaths

- During the past three and one-half decades, the suicide rate for Oregon 15- to 19-year-olds has increased more than five-fold.
- The long-term increase in Oregon's overall suicide rate has been driven almost entirely by the sharp increase in suicide by the state's adolescents and young adults.
- During the last three and one-half decades, the suicide by gun rate increased 4.3 times faster than did the rate for other methods.

Attempts

- Twenty-two percent of Oregon high school students reported considering suicide; 9% said they attempted suicide, and 2% said they were treated by a doctor or nurse for an attempt.
- Female high school students reported attempting suicide more than twice as often as did males (12% vs. 5%).

- Non-white and Hispanic students attempted suicide more often than did whites.
- Students enrolled in schools with a small student body were more likely to attempt suicide than were other students.
- Youth who had no caring adults to talk to were three times more likely to attempt suicide than were those who could go to at least two adults (16% vs. 5%).
- Physically abused students were five times more likely to try to kill themselves than were their non-abused counterparts (19% vs. 4%).
- Sexually abused students were almost four times more likely to try to kill themselves than were their non-abused counterparts (22% vs. 6%).
- Very overweight and very underweight youth were more likely to attempt suicide.
- Students who smoked more than a pack of cigarettes a day were nine times more apt to attempt to kill themselves than were non-smokers (45% vs. 5%).
- Frequent alcohol drinkers (20+ days of the previous 30) were seven times more likely to attempt suicide than were non-drinkers (29% vs. 4%).
- Students who abused inhalants (e.g., glue, spray paint) 10 or more times during the previous 30 days attempted suicide six times more often than non-abusers (46% vs. 8%).
- Teens who were sexually active, particularly at an early age, were more likely to report suicide attempts.
- Those who were pregnant (or caused a pregnancy) two or more times were eight times more likely to attempt suicide than were virgins (41% vs. 5%).
- The home environment is an important predictor of suicidal and other risky behavior among Oregon high school students.

METHODOLOGY

The Youth Risk Behavior Survey (YRBS) collects self-reported demographic and behavioral data from Oregon high school students; it is the counterpart to the Behavioral Risk Factor Survey, a survey of Oregonians 18 or older. (A report on adult suicide ideation was published last year.[8]) The YRBS is conducted in the spring of odd-numbered years.

The 1997 YRBS included almost 35,000 students, more than any previous survey.

Fifty high schools were randomly selected, according to the federal Centers for Disease Control and Prevention (CDC) protocol, to participate in the 1997 YRBS. Because only 24 agreed to participate, the sample was insufficient to meet CDC random sample guidelines. Instead, results from a convenience sample consisting of 78 volunteer schools and the 24 schools that originally agreed to participate are included in this year's data. (All school superintendents for each of Oregon's 233 public schools having grades 9, 10, 11, or 12 were invited to participate in the 1997 YRBS; participating schools are listed in Appendix A.) Although some large school districts declined to participate, the geographic representation of the sample was the most widespread of any Oregon YRBS. Ultimately, about one in five high school students were surveyed; 34,933 surveys were returned.[9]

Throughout this report, and in their own words, are statements made by the students; they are reproduced as written and placed in quotes.*

****Ellipses mark deleted expletives.***

For tabulations, the survey data was weighted to more accurately represent Oregon's population of high school students. Each student's survey was assigned a weight based on the size and socioeconomic rank of his or her school.

School participation in the YRBS required permission at both district and school levels. In addition, schools were required to notify parents of the survey and give parents the option to withdraw their child/children from participation. Finally, students themselves could decline to take the survey.

"I think this [the survey] is a great idea. I appriciate that someone is willing to spend the time to do this kind of thing. Its a concern of many and I'm glad that we have this oppurtunity."

In order to verify the honesty of responses, surveys were checked visually and then by computer for consistency between questions. Three percent (1,100 surveys) were not counted because of answers to a verification question (a question to which an affirmative answer should not occur). Five percent of the surveys were removed because they had 11 or more inconsistencies (e.g., drank more alcohol in the

"Who ever wrote this survey obviously based it on a "sterotypical" teenager. I resent the implication that all teenagers are on a hormonal rampage, rebeling against their parents & society, by leading a high risk life style including Sex, drugs, and rock & roll. Most teenagers will try a risky behavior at some point. I believe this is Darwin's theory of survival of the fitest, & this "rebelous" stage is only a genetic way to rid the human race of the truely stupid. Most People survive their teens, because teens do have a small ammount of common sense, and a survival instinct."

last month than they had drunk in their life), out of range answers (e.g., answered "H" on a question with "A" to "D" responses allowed), and multiple answers where only one answer was allowed. Another 434 surveys were not usable in final tabulations because gender or grade was missing. A total of 7.3% of the surveys (2,555) were eliminated by the above methods. All inconsistent pairs, out of range answers, and multiple answers were counted as missing data on the remaining surveys. The final sample included 32,378 usable surveys, representing 20.5% of the state's 157,769 high school students.

The YRBS included a large number of Oregon students; the results will be useful in tracking trends and changes in the health risk behaviors of youth in our state, but may not be representative of those who dropped-out of school or declined to participate in the survey.

This report describes demographic, environmental, and behavioral characteristics associated with suicide attempts, identifying those that are predictive of an increased risk of suicidal behavior among Oregon's High School youth. Few of the variables are causative (e.g., not using a seatbelt does not cause suicide), although some may be more directly related to subsequent suicidal behavior (e.g., physical abuse). Many youth have a constellation of risk factors, some of which arise in the home. However, few of the questions included in the YRBS directly pertain to the home environment.

RESULTS

NUMBER AT RISK

Results from the YRBS paint a disturbing picture of unhappy youth; 22% had considered suicide (Figure 2). The data suggest an estimated 35,000 Oregon high school students considered suicide during the year preceding the survey. Of those, 14,000 attempted suicide and 2,500-3,500 were treated for their attempts. These figures may seem high, but they are what the students reported, and are consistent with YRBS results in other states (Table 1).

Table 1. Oregon and U.S. Students Reporting Suicidal Ideation and Behavior, 1995 and 1997

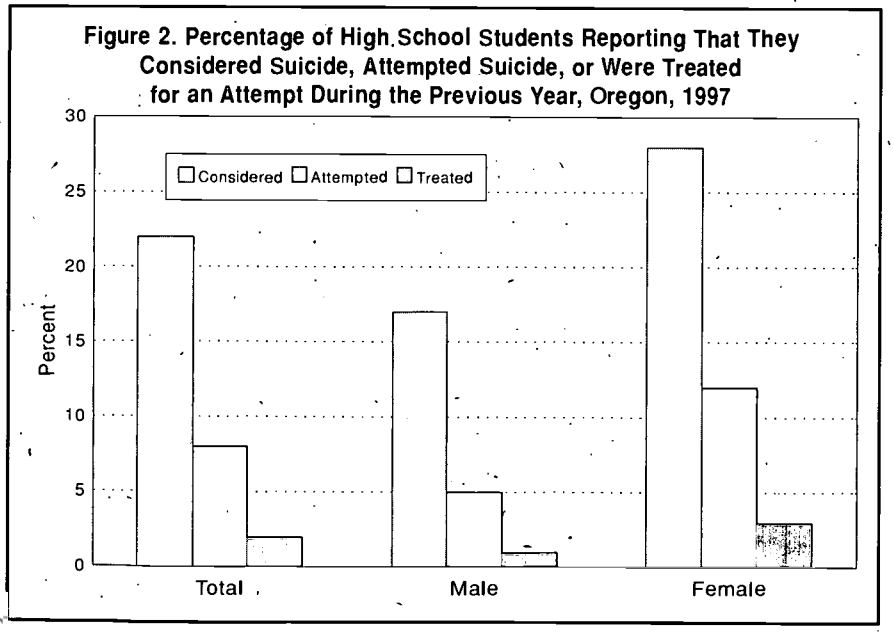
Within Last 12 Months	Oregon		U.S.
	1997	1995	1995
Considered suicide	22%	24%	24%
Attempted suicide	9%	9%	9%
Treated for attempt	2%	2%	3%

Most attempts are probably not made with death as the goal. Rather, they are cries for help motivated by a desire to resolve interpersonal conflicts — especially in the case of medically non-serious attempts.[10]

Suicidal behavior is a consequence of a complex interaction of factors, not a single event, although a single event may act as a trigger.[11] YRBS data show that suicidal behavior is strongly linked to other forms of risky or potentially self-destructive behavior. Youth engaging in one risky behavior are likely to also engage in others, as well. For example, many teens who reported attempting suicide were using licit and illicit drugs, drinking and driving, and engaging in unsafe sex practices. Further, the larger the number of risk factors reported by the youth, the greater the risk of suicidal thought and behavior (Figure 3).

An estimated one in five Oregon high school students considered suicide.

Figure 2. Percentage of High School Students Reporting That They Considered Suicide, Attempted Suicide, or Were Treated for an Attempt During the Previous Year, Oregon, 1997



"I think it's mainly family problems that make teens the way they are. Believe me, there's a lot of people out there with problems."

DEMOGRAPHICS

Gender

Although male adolescents are far more likely to make an attempt that results in death, females are more likely to make non-fatal attempts.[13] Five percent of males in the YRBS reported attempts compared to 12% of females (Table 2).

A female student was twice as likely to make a suicide attempt than was a male.

Grade

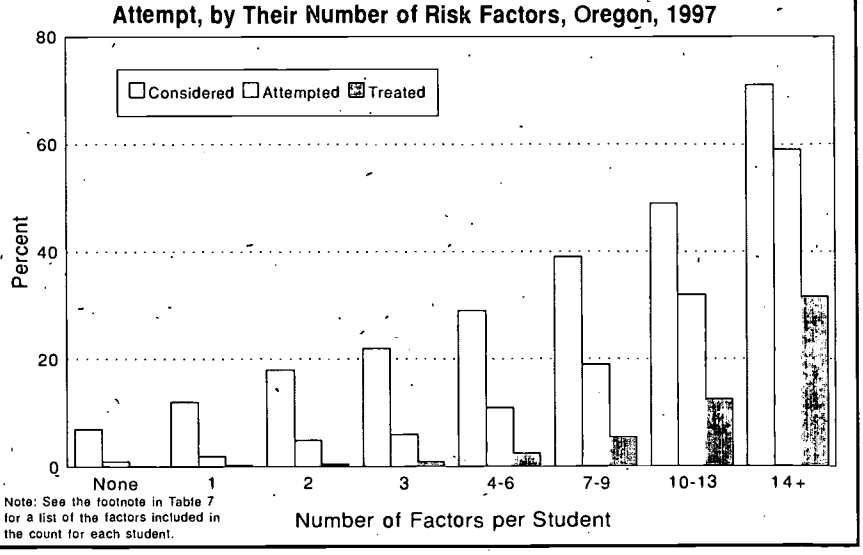
Suicidal attempts were reported most often by freshman and least often by seniors. The proportion who attempted suicide declined from 11% to 5%, respectively. This trend, however, is the opposite of that seen among attempts that resulted in death; the number of deaths from self-inflicted injuries increases with age among teens.[13] (The youngest Oregon child to commit suicide was a seven year old boy who shot himself in 1990.)

Race/Ethnicity

"I think many people close their eyes to the visible. Things that their children are screaming silently."

Minority groups often bear the brunt of inequalities in Oregon society and these inequalities are too often mirrored in the risk of youth suicide. Non-white and Hispanic students were most apt to report attempting suicide, with American Indians twice as likely as non-Hispanic whites to report an attempt (16% vs. 8%). This elevated risk is apparent in the African American and American Indian youth suicide death rates, as well.[14]

Figure 3. Percentage of High School Students Reporting That They Considered Suicide, Attempted Suicide, or Were Treated for an Attempt, by Their Number of Risk Factors, Oregon, 1997



Note: See the footnote in Table 7 for a list of the factors included in the count for each student.

TABLE 2. Percentage of Students Considering Suicide, Attempting Suicide, or Being Treated for a Suicide Attempt During the Previous Year, Oregon Youth Risk Behavior Survey, 1997 (Part 1)[1]

Characteristic	% with Characteristic	Considered Suicide			Attempted Suicide			Treated for Attempt	
		Both	M	F	Both	M	F	Both	Attempters[2]
TOTAL	100%	22	17	28	9	5	12	2	24
GRADE									
9	30	24	17	30	11	7	15	3	23
10	28	23	16	30	9	5	13	2	31
11	23	22	17	27	8	5	10	2	31
12	19	19	16	21	5	4	6	1	26
RACE									
White	84	22	16	27	8	5	11	2	25
African American	2	21	18	25	10	5	15	4	43
Hispanic	5	22	15	29	12	7	16	4	31
Asian/Pacific Islander	3	20	16	25	9	6	13	3	29
American Indian	2	28	23	34	16	12	19	6	38
Other	4	31	23	38	13	8	18	5	38
SCHOOL SOCIOECONOMIC STATUS									
1 (Lowest)	12	22	16	28	11	7	14	3	30
2	24	23	18	28	10	6	13	3	27
3	28	23	18	30	9	6	13	2	26
4 (Highest)	36	20	15	26	7	4	9	2	27
ENROLLMENT LEVEL									
<100	2	25	19	32	12	8	16	4	31
100-399	13	23	18	27	10	6	13	2	24
400-799	15	23	17	29	9	6	12	3	29
800-1199	18	21	15	26	9	5	12	2	27
1200+	53	22	16	28	8	5	11	2	27
NUMBER OF CARING ADULTS									
None	16	35	27	44	16	10	22	5	32
1	19	27	19	33	10	6	14	3	25
2-3	36	19	13	24	6	3	9	1	22
4+	30	16	13	19	5	4	7	1	27
EVER PHYSICALLY ABUSED									
No	73	15	11	19	4	2	6	1	22
Yes	27	38	29	46	19	13	25	6	30
EVER SEXUALLY ABUSED									
No	85	18	15	22	6	5	8	1	23
Yes	15	41	35	42	22	20	23	7	33
EMOTIONAL PROBLEMS									
No	94	20	15	25	7	5	10	2	25
Yes	6	57	54	57	30	25	31	11	36
HOUSEHOLD ENVIRONMENTAL TOBACCO SMOKE									
No smokers	63	19	15	24	6	4	9	2	27
Yes, but not inside	18	26	19	33	11	7	16	3	25
Yes, inside	19	27	20	35	13	8	18	4	29
HARASSED AT SCHOOL*									
No	69	16	12	20	5	3	7	1	27
Yes	31	34	25	42	15	10	20	4	27
CARRIED A WEAPON TO SCHOOL*									
No	88	20	14	26	7	4	10	2	23
Yes	12	35	29	54	19	13	35	7	34
NUMBER OF TIMES THREATENED OR INJURED AT SCHOOL[3]									
None	93	20	15	26	7	4	11	2	24
1-5	6	42	34	54	22	16	32	8	35
6+	1	60	53	79	41	38	50	24	60

[1] Based on 32,378 weighted cases from 102 schools.

[2] Based on the 2,611 students reporting one or more attempts during the previous year.

[3] With a weapon on school property during the previous year.

* During the previous 30 days.

HOW TO USE THIS TABLE: The values shown in this table, except "% with Characteristic", indicate the percentage of individuals who considered suicide, or attempted suicide, or who were treated for an attempt. For example, the "17" under the male column of "Considered Suicide" in the ninth grade row indicates that 17% of ninth grade males considered suicide.

Socioeconomic Status

The socioeconomic status (SES) of the student's school showed a modest association with suicidal behavior.[14] Students attending a low SES school were 36% more likely to have attempted suicide (11% did so, compared to 7% of students at high SES schools). Measurement of the SES of individual students would probably yield more pronounced differences.

One in six students said they did not have a caring adult they could talk to.

HOME ENVIRONMENT

Caring Adults

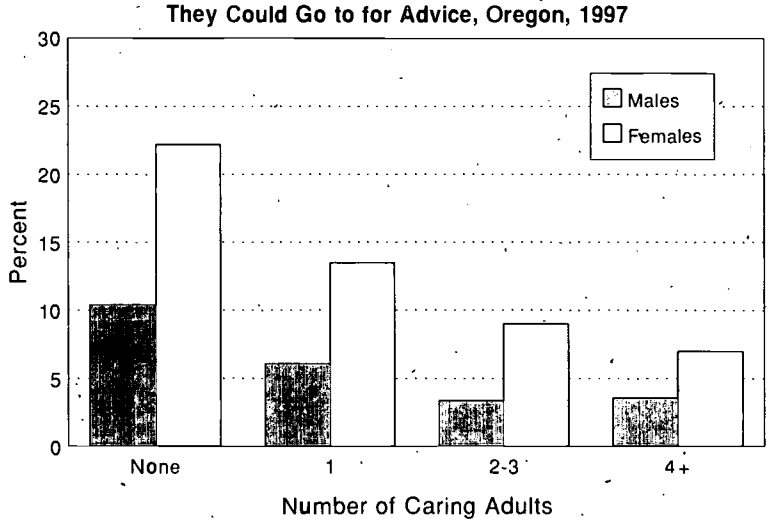
One in six students (16%) do not have at least one caring adult that they can talk to about their problems (Figure 4). (See Appendix B for a list of the questions and answers in the YRBS questionnaire.) These adolescents were three times more likely to attempt suicide than those with four or more caring adults (16% vs. 5%). Students who said they had no caring adult to talk to were more likely to have been physically and sexually abused, and to report emotional problems. (See Appendix C for further discussion of the relationship between the home environment and adolescent behavior.)

"If you want to find the real problem look at family values and bonds. Ask students how they feel about their family, how close they are to their family, and what do their parents teach them about the world. The kinds who aren't close to their family are going to be the ones with the most problems."

Physical Abuse

Over one-quarter (27%) of all high school students said they had been physically abused at some time, 26% of males and 29% of females. These youths were almost five times

Figure 4. Percentage of High School Students Reporting That They Attempted Suicide, by the Number of Caring Adults They Could Go to for Advice, Oregon, 1997



more likely to attempt suicide than those who had not been physically abused (19% vs. 4%).[20, 21] Although the effect of physical abuse was greatest when the abuse occurred during the previous year, the risk of attempting suicide persisted for many years. Students abused more than five years previously were still three times more apt to make an attempt within the year prior to the survey. The Third National Incidence Study of Child Abuse and Neglect (NIS-3) found that children from the lowest income families were 22 times more likely to be seriously injured from physical abuse than were those in the highest income families.[22]

Physically abused youth were five times more likely to attempt suicide.

Sexual Abuse

Fifteen percent of students (5% of males and 25% of females) reported that they were victims of sexual abuse. These young Oregonians were nearly four times more likely to make a suicide attempt than were those who were free from this type of abuse (22% vs. 6%), with the risk differential more pronounced among males (Figure 5). As with physical abuse, the effect of sexual abuse was greatest within a year of the abuse, but the attempt rate was still three times higher for children abused more than five years prior to the survey. The

"I think moral values have decreased tremesly in society today. Almost to a point that I don't think there is any going back. That is sordof a sad thing to hear."

DROPOUTS AND HOMELESS YOUTH

The 1997 survey does not include information about Oregon high school dropouts—youth that are at elevated risk of engaging in self-destructive behaviors. During the 1996-1997 school year, about 10,500 students dropped out, representing a four-year dropout rate of 25%.[15] The suicide attempt rates are unknown for this group, but in a survey of Oregon students enrolled in alternative schools, 32% said they considered suicide, 17% said they attempted suicide, and 5% said they were treated by a doctor or nurse for the attempt.[16] A survey of incarcerated students yielded similar results: 30% considered suicide, 17% attempted suicide, and 7% were treated for an attempt.[17] Many drop-outs are, or become, homeless. In Multnomah County alone, an estimated 1,200 children (grades 7-12) were homeless during 1997; statewide, 3,700 were believed to be homeless.[18] Among Portland homeless youth, 57% reported that they had considered suicide at some time and 30% were currently considering suicide; 40% reported at least one past attempt.[19]

Children both physically and sexually abused were ten times more likely to try to kill themselves than were non-abused children.

Table 3. Suicide Ideation and Behavior Among Students Both Physically and Sexually Abused, Compared to Non-abused Students

Within the Last 12 Months	Not Abused (%)	Abused (%)
Considered suicide	13	52
Attempted suicide	3	31
Treated for attempt	1	11

NIS-3 found that children in the lowest income families were 18 times more likely to be sexually abused than those in the wealthiest families.[22]

A child who is sexually abused is too often also physically abused; these doubly abused youth (9% of the respondents) were *ten times* more likely to try to kill themselves than those free of this abuse (Table 3).[23] The cumulative effects of these, and other environmental factors, can be seen in Appendix C. Riggs et al concluded that "At the very least, psychologic difficulties stemming from abuse may serve as catalysts for problem behaviors during the vulnerable period of adolescence."[24] In a recent review of abuse studies, Silverman and her colleagues noted that young adults who were abused during childhood or adolescence were at greater risk of a variety of short- and long-term impairments including sexual disturbances, anxiety and fear, low self-esteem, depression, aggressive behavior, and interpersonal problems.[25]

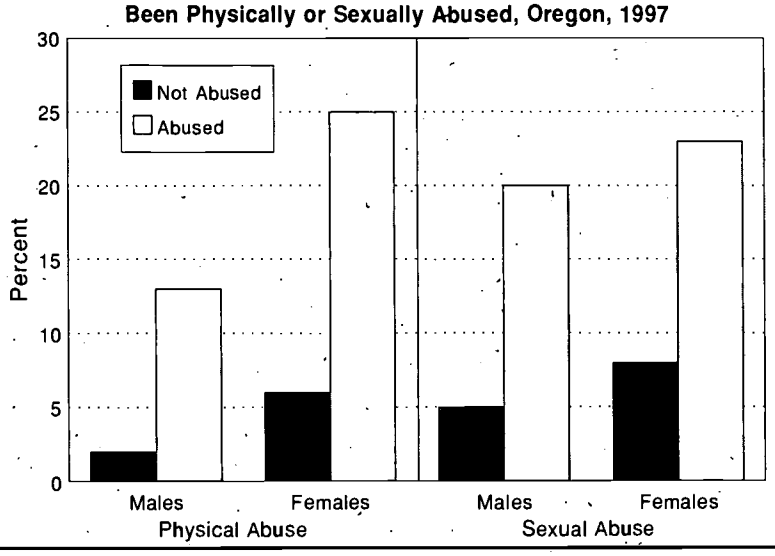
Only 67% of high school students said they had been neither physically nor sexually abused.

Emotional Problems

Six percent of students reported emotional problems, and, not surprisingly, were more apt to attempt suicide. While 7% of those who did not report emotional problems attempted suicide, 30% of those who reported problems said they had tried to kill themselves. In psychiatric studies of suicide completers, only a very small minority of adolescents were found to be free of discernible disorders.[26, 27]

"I'm scared of the world, there are too many death traps amongst us. I can't avoid them my entire life. HELP ME."

Figure 5. Percentage of High School Students Reporting That They Attempted Suicide, by Whether They Reported Ever Having Been Physically or Sexually Abused, Oregon, 1997



Household Smoking

Few questions on the YRBS relate directly to the home environment, but one that explicitly does so is a question about cigarette smoking in the home by a person other than the student. Because smoking is more common among persons with less education and lower household income, it can be considered a rough indicator of the socioeconomic status of the student's family.[28] Students with family members who smoked were twice as likely to attempt suicide (12% vs. 6%). In four in ten households, someone (besides the student) smoked; in half those households with a smoker, someone smoked *inside* the home.[29] Adolescents in homes with second-hand smoke attempted suicide more often (13% compared to 11% in homes where the smokers indulged their addiction elsewhere).

Almost two of every five students lived with someone who smoked.

SCHOOL ENVIRONMENT

School Size

The number of students enrolled in a school is inversely related to the proportion of students who say they attempted suicide. Those in schools with fewer than 100 enrollees were more likely to say they attempted suicide compared to those in schools with over 1,200 enrollees (12% vs 8%).

Harassment

Almost one-third (31%) of students reported being harassed at school during the previous 30 days; as a group,

"I think this school fails to meet the needs of the students. It's not only the school, but the whole community. I believe that [city name] is a disgrace of a town, because I don't feel that anyone cares about the kids or is willing to do anything for them. This is frustrating and incredibly discouraging."

Figure 6. Percentage of High School Students Reporting That They Attempted Suicide, by the Number of Times They Were Threatened or Injured With a Weapon at School, Oregon, 1997

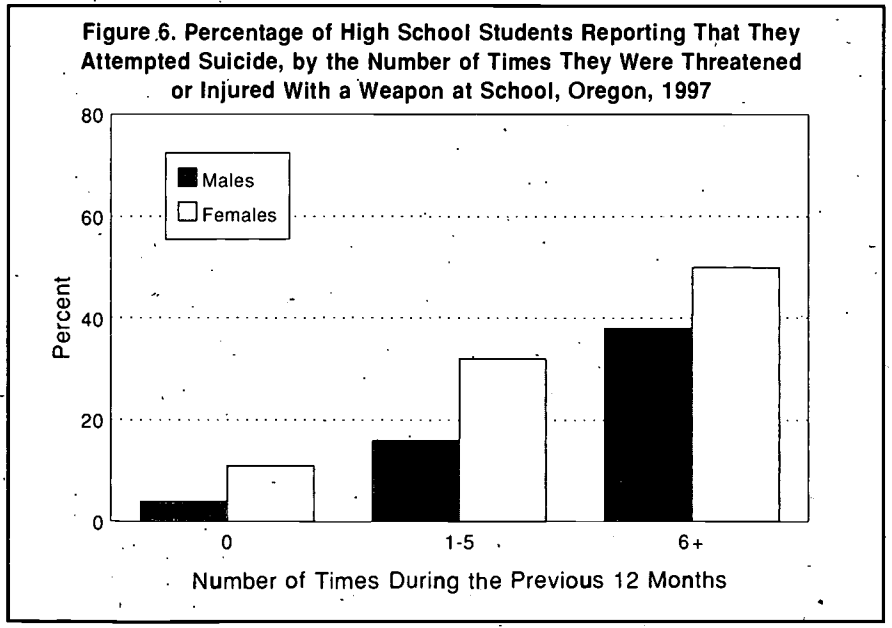


Table 4. Harassment and Suicide Attempts, by Reason*

Reason	% Harassed for Reason	% Who Attempted Suicide
Not Harassed	69	5
Race/National Origin	2	12
Unwanted Sexual Attention	8	21
Perceived Sexual Orientation	2	21
Physical Disability	1	14
Other	13	13
Don't Know	7	12

* Percentage of students reporting harrassment during the previous 30 days and the percentage that attempted suicide during the previous 12 months.

they were three times more likely to attempt suicide than those who were not victimized (15% vs. 5%). At greatest risk were those harassed for sexual reasons. (Table 4).

Weapon-Carrying

During the month prior to the survey, 19% of students carried a gun, knife, and/or club for use as a weapon (12% at school). Six percent carried guns (2% at school). Weapon carriers were over twice as likely to report attempting suicide (16% vs. 7%); those carrying weapons at school were at somewhat greater risk (19% vs. 7%).

Violence

Seven percent of students said they had been threatened or injured with a weapon such as a gun, knife, or club on school property during the previous 12 months (Table 2). One percent reported six or more incidents. Two-fifths (41%) of those in the latter group attempted suicide compared to just 7% of those who had not been threatened or injured, a six-fold difference (Figure 6).

"I am a teenage girl and I do have an eating disorder along with about 80% of the other teenage girls, because of these druggie supermodles that we have to look up to. It is very depressing world for kids, life is verry confusing."

PERSONAL BEHAVIORS

Weight

Self-perceived bodyweight is associated with suicidal behavior. While both very underweight (2% of all students) and very overweight students (3%) were more likely to attempt suicide, overweight students were at the greatest risk. There was a sexual dichotomy, however; obesity was associated with a greater risk than skinniness among females but the opposite was true for males. One in twenty students (5%) used extreme measures for weight control -- self-induced vomiting and/or laxative use. Those who did so were over four times more likely to attempt suicide (30% vs. 7%).[30]

In an average high school classroom of 25 students, one student began smoking when he or she was no more than eight years old.

Substance Abuse

Cigarette Smoking. One-fourth of students (23%) reported smoking during the previous 30 days (Table 5). No greater risk differential was seen than that between heavy smokers (21+ cigarettes per day) and non-smokers; heavy smokers were nine times more likely to attempt suicide (45% vs. 5%).

TABLE 5. Percentage of Students Considering Suicide, Attempting Suicide or Being Treated for a Suicide Attempt During the Previous Year, Oregon Youth Risk Behavior Survey, 1997 (Part 2)[1]

Characteristic	% with Characteristic	Considered Suicide			Attempted Suicide			Treated for Attempt	
		Both	M	F	Both	M	F	Both	Attempters[2]
WEIGHT									
Very underweight	2	29	28	32	13	11	17	4	30
A little under- to a little overweight	94	21	16	26	8	5	11	2	26
Very overweight	3	41	30	46	18	9	22	5	27
VOMITED OR USED LAXATIVES FOR WEIGHT CONTROL*									
No	95	20	16	25	7	5	10	2	25
Yes	5	49	27	55	30	17	33	10	34
NUMBER OF CIGARETTES SMOKED DAILY ON DAYS SMOKED*									
None	77	17	13	21	5	3	7	1	22
<1-5	16	33	23	40	15	8	20	4	25
6-20	6	38	27	49	21	15	27	8	38
21+	1	60	59	63	45	41	55	23	52
AGE FIRST SMOKED									
<11	9	34	27	45	19	14	27	7	35
11-12	11	31	21	40	15	8	21	4	27
13-14	17	26	18	33	11	6	15	3	23
15+	10	24	18	29	8	4	11	2	25
Never	53	15	11	18	4	2	5	1	21
THINK SMOKING IS COOL									
No	93	21	15	27	8	5	11	2	25
Yes	7	34	27	46	15	12	21	6	39
NUMBER OF DAYS DRANK ALCOHOL*									
None	54	16	12	20	4	3	6	1	21
1-5	32	27	19	33	11	6	15	3	24
6-19	13	34	25	44	17	11	24	6	35
20+	2	45	35	66	29	21	45	14	49
NUMBER OF DAYS BINGED ON ALCOHOL*									
0	68	18	13	23	6	3	8	1	22
1-5	24	30	22	37	14	9	19	4	29
6-19	6	35	26	48	17	10	26	6	37
20+	2	44	41	62	38	34	61	19	51
AGE FIRST DRANK ALCOHOL									
<11	17	33	25	45	17	11	25	5	33
11-12	12	27	18	37	12	7	17	3	28
13-14	25	25	17	31	9	5	13	2	23
15+	17	19	15	22	6	3	8	2	28
Never	29	13	10	16	3	2	4	<1	14
NUMBER OF TIMES DRINKING & DRIVING*									
None	89	21	15	26	8	4	11	2	25
1-3	9	31	25	39	14	10	19	4	32
4+	2	37	33	52	20	17	27	10	53
SEATBELT USE									
Always	53	18	14	22	6	4	8	1	23
Most of the time	31	24	17	31	10	5	14	2	25
Sometimes	9	31	22	42	15	8	23	4	28
Rarely	5	33	24	49	16	10	26	6	39
Never	2	33	30	44	20	18	27	10	50

[1] Based on 32,378 weighted cases from 102 schools.

[2] Based on the 2,611 students reporting one or more attempts during the previous year.

* During the previous 30 days.

Heavy cigarette smokers were nine times more likely to try to kill themselves than were nonsmokers.

Cigarette smoking at an early age was associated with a greater risk of suicidal behavior; in fact, the younger the age of initiation, the greater the risk. Nine percent of high school youth began smoking before their eleventh birthday and those who did were five times more likely to attempt suicide than never-smokers (19% vs. 4%). Seven percent of the students thought smoking was "cool"; these adolescents were twice as likely to attempt suicide (15% vs. 8%).

Alcohol Consumption. Frequent alcohol consumption is also associated with suicide attempts. While nearly half (46%) of students drank alcohol during the previous month, and were at greater risk of suicidal behavior, those who drank on 20 or more of the previous 30 days were at greatest risk, 29% compared to 4% of abstainers (Figure 7).

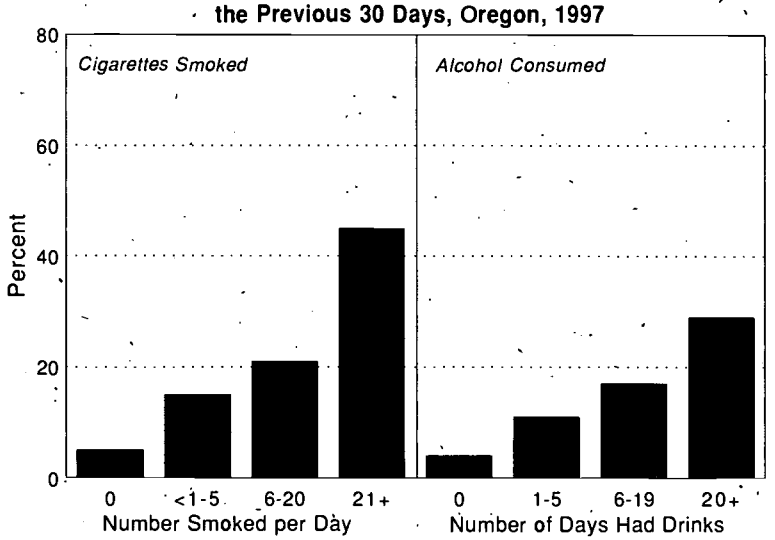
Students who began drinking alcohol when they were 10 or younger were six times more likely to attempt suicide than were abstainers.

Binge drinking (5+ drinks within a few hours) was popular with one-third (32%) of students, and the more often they binged, the greater the likelihood that they would also attempt suicide. Those who binged on 20 or more of the previous 30 days were six times more likely to say they tried to kill themselves (38% compared to 6% of those who did not binge). Both students who would drive after drinking, and those who did not use seatbelts, were more likely to say they attempted suicide (Table 5).

Like cigarette smoking, alcohol consumption at an early age was associated with a greater risk of suicidal behavior; students who began drinking when they were 10 or younger were six times more likely to try to attempt suicide than those who did not drink (17% vs. 3%).

"I think teen's use drugs, alcohol & tobacco becouse they feel they have too much stress & no-one to talk to!"

Figure 7. Percentage of High School Students Reporting That They Attempted Suicide, by Cigarette and Alcohol Use During the Previous 30 Days, Oregon, 1997



Inhalant Use. Five percent of Oregon high school students sniffed glue (or otherwise abused inhalants such as spray paints) during the 30 days prior to the survey, and the more often they did this, the more likely they were to attempt suicide. Fully 46% of frequent users (10+ times in the previous month) said they tried to kill themselves, six times higher than the 8% recorded for abstainers.

Almost one-half of frequent inhalant abusers attempted suicide.

Illicit Drug Use. Illicit drug use was widespread among the state's high school students with one in four (23%) using marijuana, the most commonly used illicit substance. As with other substance use (e.g., tobacco and alcohol), the greater the use, the greater the odds that the user would try to commit suicide. Both cocaine use and injection drug use were better predictors of suicidal behavior than marijuana use; 41 percent of heavy cocaine users and 56 percent of injection drug users reported trying to kill themselves.

"To escape from reality, behind the smoke we hide."

Use of multiple substances is clearly associated with an increased risk of suicide attempts. Fifty-three percent of students said they used alcohol, tobacco or other drugs.[31] Table 6 summarizes the association between suicidal behavior and use of mood-altering substances. Those who used six or more substances were over 13 times more likely to say they tried

"School counselors need to be more protecting and secrative. You can't tell them about drugs or suicide or they have to tell the cops. If you have no one to turn to, you go to the counselor. But you cant even trust them. Were in High School now not Elementary School. We deal with bigger problems other than friends & enemies. We have to deal with death, depression, abuse, sex & they tell the cops."

Table 6. Percentage of Students Engaging in Suicidal and Sexual Behavior, by Substance Use, Oregon Youth Risk Behavior Survey, 1997

Behavior	No Tobacco, Alcohol, or other Drugs	Tobacco & Alcohol[1]	2+ Illicit Substances
Suicidal Behavior			
Considered Suicide	13.5	27.3	39.7
Attempted Suicide	3.1	11.2	21.6
Treated for Attempt	0.5	2.7	7.5
Sexual Behavior[2]			
Never had Sex	85.2	50.3	28.7
Not Within Last 3 months	5.8	14.4	21.0
1 Partner	8.1	30.1	34.5
2 Partners	0.4	3.7	8.5
3+ Partners	0.3	1.4	6.9

1. Excluding illicit substances.
2. Within last three months

TABLE 7. Percentage of students considering suicide, attempting suicide, or being treated for a suicide attempt during the previous year, Oregon Youth Risk Behavior Survey, 1997 (Part 3)[1]

Characteristic	% with Characteristic	Considered Suicide			Attempted Suicide			Treated for Attempt	
		Both	M	F	Both	M	F	Both	Attempter[2]
NUMBER OF TIMES SNIFFED INHALANTS*									
None	95	21	15	26	8	5	10	2	26
1-9	4	49	37	58	28	18	37	8	29
10+	1	63	54	76	46	37	60	19	40
NUMBER OF TIMES USED MARIJUANA*									
None	76	19	14	24	6	3	9	1	22
1-9	14	32	23	41	15	9	21	4	27
10+	9	35	28	47	19	14	27	8	42
NUMBER OF TIMES USED COCAINE*									
None	98	20	15	26	7	4	10	2	23
1-9	2	50	42	57	33	27	38	14	44
10+	<1	51	49	56	41	43	38	25	61
EVER INJECTED DRUGS									
No	99	21	15	26	8	4	11	2	24
Yes	1	69	67	72	56	57	56	33	60
NUMBER OF TIMES EVER USED OTHER DRUGS									
None	85	19	13	23	6	4	9	1	22
1-9	11	34	24	42	15	9	21	4	28
10+	4	42	36	51	25	20	33	11	44
AGE AT FIRST SEXUAL INTERCOURSE									
<13	5	37	31	48	22	17	31	9	41
13-14	12	33	26	40	17	12	22	6	33
15-16	15	27	21	32	12	7	15	3	30
17+	3	20	14	26	6	5	7	1	24
Never	65	18	12	23	5	3	8	1	18
TOTAL NUMBER OF SEXUAL PARTNERS									
None	65	18	12	23	5	3	8	1	18
1-2	22	28	21	33	12	8	17	3	27
3-5	9	32	25	39	15	10	20	5	36
6+	5	38	35	42	22	21	24	9	43
NUMBER OF SEXUAL PARTNERS (LAST 3 MONTHS)									
Never had sex	65	18	12	23	5	3	8	1	18
Yes, but over 3 mos. ago	12	27	22	34	13	8	18	4	28
1	19	29	22	34	13	9	16	4	32
2	3	40	32	47	22	14	30	7	35
3+	2	40	34	51	26	23	32	13	51
CAUSED PREGNANCY OR BEEN PREGNANT									
Never sexually active	65	18	12	23	5	3	8	1	18
Sexually active, never pregnant	31	28	22	34	13	9	17	4	30
Once	3	41	37	44	22	19	24	10	47
Two or more times	1	51	43	56	41	36	45	14	35
NUMBER OF RISK FACTORS**									
None	18	7	6	8	1	1	1	<1	6
1	17	12	9	15	2	1	3	<1	19
2	14	18	12	23	5	3	6	1	13
3	11	22	16	28	6	4	9	1	17
4-6	23	29	19	38	11	5	18	2	22
7-9	12	39	30	48	19	12	25	5	30
10-13	5	49	37	62	30	22	40	12	39
14+	1	71	67	77	59	53	66	31	52

[1] Based on 32,378 weighted cases from 102 schools.

[2] Based on the 2,611 students reporting one or more attempts during the previous year.

* During the previous 30 days.

**A count of the number of risk factors for each student. The following factors were included; very under- or over-weight; physically abused; sexually abused; threatened or injured at school; carried a weapon at school;used tobacco; began smoking before age 11; drank; drank and drove; binged on alcohol; never, rarely or sometimes used a seatbelt; abused inhalants; used marijuana, cocaine or other drugs; had sexual intercourse; had 6+ sexual partners; had sex before age 15.

to kill themselves than were students who reported no substance use, (53% vs. 4%). For many adolescents in emotional pain, drugs and alcohol may be a way of numbing feelings of rejection and despair.[32]

"I DON'T THINK THIS SCHOOL SHOULD BE WORRIED ABOUT DRUG USE. I MEAN YEAH DRUGS ARE ILLEGAL BUT IT'S OUR BODIES, OUR CHOICE, if WE AS STUDENTS WANT TO USE DRUGS ITS OUR BUSINESS."

In a national study, substance abuse by parents was also linked to suicide attempts by their children; runaway and homeless youth whose family members were substance abusers were twice as likely to attempt suicide as were those whose parents were not substance abusers.[33]

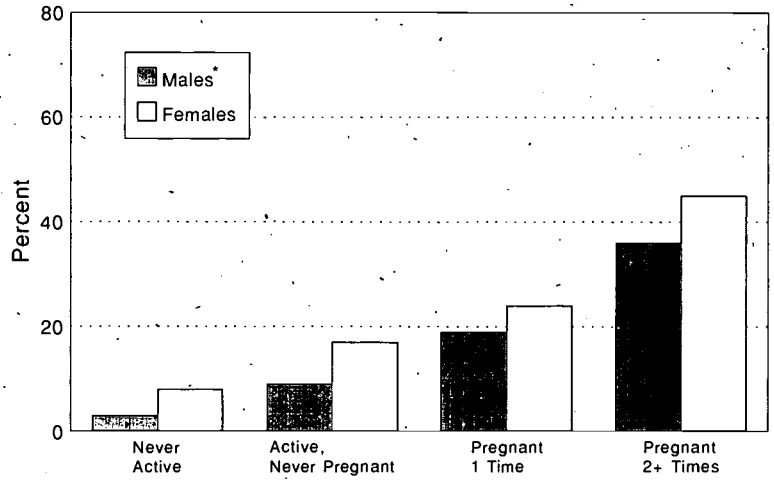
Sexual Behavior

Sexual intercourse at an early age was associated with sexual abuse and suicidal behavior. (This does not mean that sexual intercourse at an early age, in and of itself, causes youth to attempt suicide.) One-third (35%) of high school students had had sexual intercourse - five percent before they were teenagers (Table 7). As with tobacco use and alcohol consumption, the younger a student was when he or she first had sex, the greater the odds that he or she would attempt suicide; the preteen group was more than four times more likely to attempt suicide than were virgins (22% vs. 5%).[34] Youth who had six or more sexual partners by the time of the survey were also over four times more likely to attempt suicide than those who had none (again, 22% vs. 5%). Those who had sex with three or more persons in the previous three months were five times more likely to attempt suicide than were virgins (26% vs. 5%).

". . . we wont aLL Live Forever so Just Do it!"

"I think that the main reason for kids using drugs, and having sex early is maybe an escape from a trapped world. There is no one there, but drugs and sex partners."

Figure 8. Percentage of High School Students Reporting That They Attempted Suicide, by Sexual History, Oregon, 1997



Percentage of students who had intercourse before age 12 that were sexually abused
Total: 38%
Male: 20%
Female: 76%

One in ten sexually active youth reported becoming pregnant (or causing a pregnancy). The four percent of all students who were ever pregnant (or caused a pregnancy) attempted suicide with a greater frequency than virgins or those who were sexually active but had not been involved with a pregnancy (Figure 8). At greatest risk were adolescents who had experienced two or more pregnancies; they were eight times more likely to make a suicide attempt than were virgins (41% vs. 5%), the second highest odds ratio for a single risk factor.

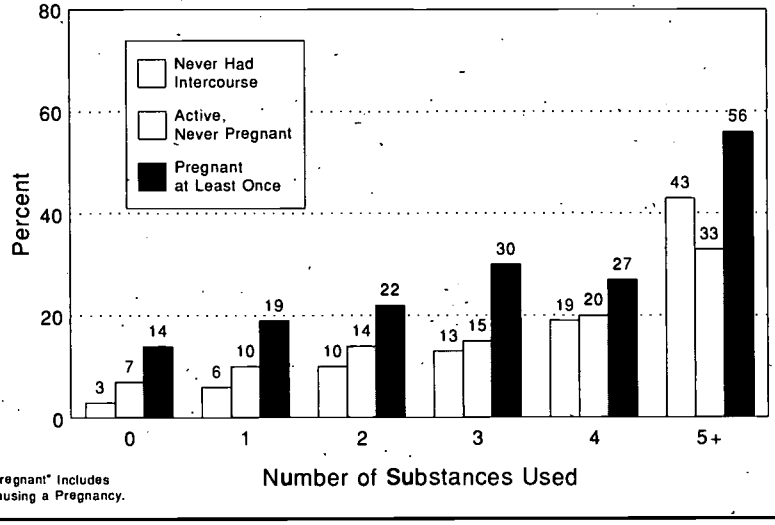
Sexual intercourse and drug use are inter-related; among substance (tobacco, alcohol, or other drug) users, 51 percent were sexually active, but among non-users only 16% were sexually active. Substance users were five times more likely to become pregnant or to cause a pregnancy. Figure 9 shows the risk of attempting suicide by sexual history and number of substances used.

"There are a lot of kids here ready to burst under stress. Inside we're so full of pain, everyone is even if we don't come across as risk takers. More & more the non-risk takers are edging nearer & nearer to the riskier side, Drugs and alcohol isn't the true problem it's just how we're dealing w/things. I'm just surpirised that so few are committing suicide."

Same-sex sexual orientation is generally accepted as a related underlying cause of teen suicidal behavior. The issue cannot be addressed from the YRBS, however, because no question regarding sexual orientation was included in the survey. One question, however, asked the students whether they had been harassed in the previous 30 days and, if so, why. Two percent of the respondents said they had been because they were *perceived* to be gay, lesbian, or bisexual. These students were four times more likely to say that they attempted suicide than were their non-harassed peers (21% vs. 5%). Among those perceived to be gay, lesbian, or bi-

"Why do you think so many teens turn to sex, drugs, and violence? It's a way of coping with their fear and confusion."

Figure 9. Percentage of High School Students Reporting That They Attempted Suicide, by Sexual History and Number of Mood-altering Substances Used, Oregon, 1997



sexual, harassed males were six times more likely than their non-harassed counterparts to attempt suicide (17% vs. 3%) while females were four times more likely (28% vs. 7%). Recently published data from Minnesota found that gay and bisexual males in grades 7-12 reported attempting suicide seven times more often than did their heterosexual counterparts.[35]

CONCLUSIONS

YOUTH AT RISK

Suicide is a persistent problem among Oregon's youth. Parents, educators, health care professionals, and others need to be aware that the changing social milieu is prompting more adolescents to consider suicide as an option.

"I wish that I knew more about a lot of health Issues. I would like someone other then a school counsler to talk to. For Instance someone who's almost died becuse of suicide. I've almost died, and I get really depressed sometimes, I need someone who went through It to talk to."

Among suicide attempters, there is a spectrum of desires, from cries for help to death. Many are ambivalent about ending their lives; they see suicide as the solution to their problems in life, but would rather live if a solution could be found.[36] There is a continuum of self-destructiveness (from subintentional to intentional) that can be measured in adolescents; these behaviors and characteristics relate to premature adult mortality, whether from natural, accidental or suicidal causes. In a recent study, measures of conduct problems and emotional instability were lowest for persons dying from natural causes of death, higher in persons dying from unintentional injuries, and highest among those who committed suicide.[37] Even if adolescents do not make overt

MYTHS AND FACTS ABOUT SUICIDE

Myth: People who talk about suicide don't kill themselves.

Fact: Eight out of ten suicides have spoken about their intent before killing themselves.

Myth: People who kill themselves really want to die.

Fact: Most people who commit suicide are confused about whether or not they want to live or die. Suicide is often a cry for help that ends in tragedy.

Myth: Once the depression seems to be lifting, would-be suicides are out of danger.

Fact: At such a time, they are most vulnerable to a reversal: something can go wrong to make the person even worse than before. The person's apparent calm may be due to having already decided on suicide.

Myth: When people talk about suicide, you should get their minds off it, and change the subject.

Fact: Take them seriously; listen with care; give them the chance to express themselves; offer whatever help you can.[32]

"I think my school has fabulous health programs; very informative. I think depression is a serious health issue that needs to be dealt with. I think it is probably the biggest health problem at my school."

"Teens today do have a lot of problems. I am a 4.00 Hispanic American female student. People think I have it all going for me, but I have my problems. So many times I feel like, at school, there is no adult who I can just talk to—they say, "I'm so glad you're such a good student," but no one really wants to listen. I have a wonderful home life, but sometimes, I need a shoulder to cry on - beside them. What I'm trying to say, is that, just because students may not drink, do drugs, or sleep around, they still may be 'at risk' How can you help students like me?"

Possible Verbal Hints of Impending Suicidal Behavior

- I won't be a problem for you much longer.
- Nothing matters.
- It's no use.
- I wish I were dead.
- That's the last straw.
- I can't take it anymore.
- Nobody cares about me.
- I won't see you again.
- I wish I were never born.

suicide attempts, they may still engage in inherently risky and self-destructive behavior that requires counseling.

Youth Risk Behavior Survey data suggest that 2,500-3,500 Oregon high school students were treated for a suicide attempt during the 12 months prior to the survey.[38] These young Oregonians are a diverse population but often share certain characteristics that can be used in identifying those at risk and targeting them for counseling and intervention. *The best individual behavioral characteristics (from the YRBS) for identifying high school students at risk of making suicide attempts are: injection drug use, frequent use of inhalants, tobacco, or cocaine, as well as multiple pregnancies.*

These are by no means the only risk factors associated with suicidal ideation and attempts (Figure 10). Self-destructive behavior is also strongly linked with a number of other characteristics and life events, many arising in unfavorable home environments (See Appendix C).

A limitation of this study is the inability to identify the minority of students who engage in suicidal behavior but who do not exhibit any behavior or school problems. Instead, these youth, who may even be academic superstars, experience anxiety and may be rigid and perfectionistic.[39] Periods of change or dislocation can precipitate an attempt.[27] Like the Hispanic student with the 4.00 GPA (whose quote appears to the left), they may excel academically and not appear to be at risk. Recent studies have also shown that suicide has a genetic component, one that is independent of depression.[40, 41]

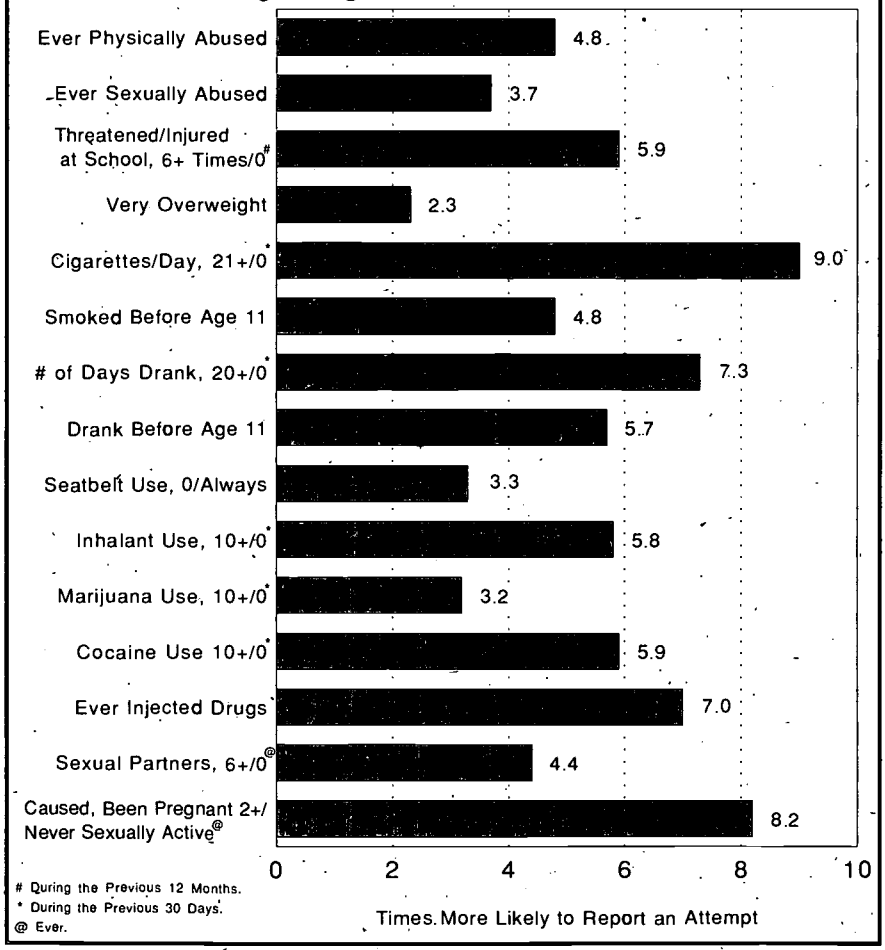
Some teenagers romanticize suicide, imagining a large funeral that will be attended by those who have been nasty or uncaring and who are now filled with remorse and sadness. They may also believe that they will be reunited with others who have died. Such romanticization can increase the risk of suicide.[42]

In a review of studies, certain personality traits were found to be particularly characteristic of suicide attempters: aggression or hostility, impulsivity, societal withdrawal or interpersonal difficulties, low self-esteem, dependency, hopelessness, external locus of control, rigid cognitive style, and poor problem-solving.[43] Exposure to a suicide or suicide attempt by a family member or friend may also trigger suicidal behavior.[44, 45] However, there is no "typical" suicidal adolescent. Each suicide is an individual act influenced by a diverse set of social and personal factors that are not always apparent.

Threats or warning signs precede as many as 80% of suicide attempts and completions, and although the majority of the threats are not followed by actions, *all* suicidal communications should be taken seriously, responded to, and evaluated.[46]

Parents often do not recognize a child's suicidal symptoms or, if they do, may feel ill-equipped to intervene.[47-49] Yet without intervention, at-risk youth may commit suicide. School staff and youth themselves should also be aware of the indicators of potential suicide risk, and should tell those in a position to help if they see someone exhibiting signs of suicidal behavior. Health care workers, too, have an important role to play in ameliorating this self-destructive behavior. There is strong evidence that adolescents often seek general medical care shortly before their suicidal behavior.[50, 51] Primary health care providers should consider the potential for

Figure 10. Odds of Reporting Having Made a Suicide Attempt During the Previous Year, by Selected Risk Factors, Oregon High School Students, 1997



During the Previous 12 Months.
* During the Previous 30 Days.
@ Ever.

WARNING SIGNS
possible indicators of increased suicide risk

Changes in behavior:
- Accident proneness
- Drug and alcohol abuse
- Physical violence toward self, others, animals
- Loss of appetite
- Sudden alienation from family and friends
- Truancy, running away
- Worsening performance at school
- Putting affairs in order
- Loss of interest in appearance
- Disposal of possessions
- Letters, notes, poems with suicidal content
- Taking unnecessary risks
- Purchasing a gun

Changes in mood:
- Expressions of hopelessness, impending doom
- Explosive rage
- Dramatic highs and lows
- Becoming suddenly cheerful after a period of depression
- Crying spells
- Lack of sleep or excessive sleep
- Decline in self-respect

Changes in thinking:
- Difficulty concentrating
- Focus on morbid or death themes
- Hearing voices, seeing visions, expressing obviously false and bizarre beliefs
- Irrational speech
- Sudden interest or disinterest in church/religion

Changes in life events:
- Death of a family member or friend, especially by suicide
- Separation or divorce
- Loss of important relationship, including pet
- Public humiliation or failure
- Serious physical illness
- Loss of financial security

These signs must be interpreted in context. Obviously many of them are common outside the realm of pre-suicidal behaviors.

Table 8. Deaths Due to Suicide, by County of Residence, Oregon 10- to 17-year-olds, 1986-1996

COUNTY	NUMBER	RATE
TOTAL	400	9.0
BAKER	5	20.0
BENTON	6	5.4
CLACKAMAS	38	7.9
CLATSOP	8	15.1
COLUMBIA	4	5.8
COOS	10	10.6
CROOK	3	12.3
CURRY	2	8.0
DESCHUTES	16	13.2
DOUGLAS	20	12.4
GILLIAM	0	0.0
GRANT	1	7.2
HARNEY	4	31.9
HOOD RIVER	3	10.9
JACKSON	14	6.1
JEFFERSON	6	26.1
JOSEPHINE	5	5.2
KLAMATH	7	7.3
LAKE	4	32.0
LANE	33	7.5
LINCOLN	7	12.9
LINN	15	10.0
MALHEUR	2	4.0
MARION	32	8.7
MORROW	0	0.0
MULTNOMAH	81	10.5
POLK	7	8.3
SHERMAN	1	31.8
TILLAMOOK	1	3.2
UMATILLA	9	8.9
UNION	4	9.5
WALLOWA	3	26.3
WASCO	2	5.4
WASHINGTON	37	7.5
WHEELER	1	49.1
YAMHILL	9	7.8
EAST OF CASCADES	71	11.5
COAST	28	10.8
OTHER	301	8.4

NOTE: Many of the rates are based on a small number of events and should be used with caution. Rates are per 100,000 population.

"I think that I have wasted my life thus far and so I don't care anymore."

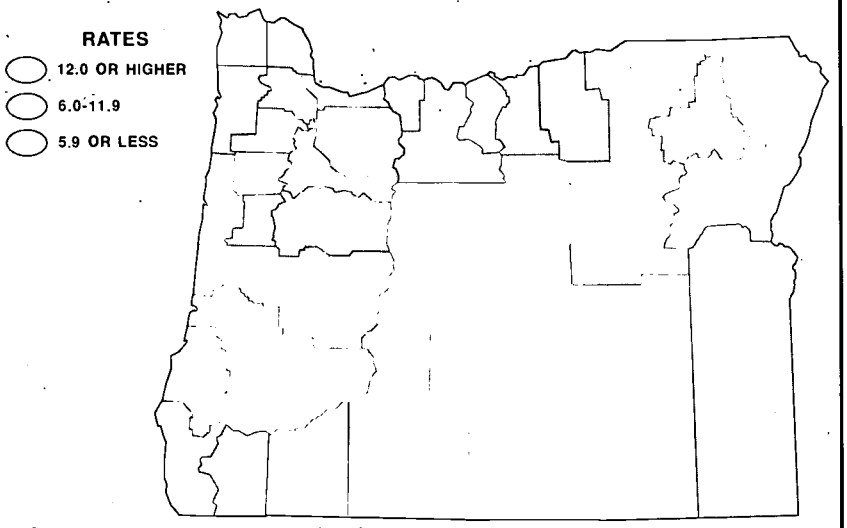
self-destructive behavior regardless of the adolescent's presenting complaint.[52] No less than 35% of Oregon attempters have made prior attempts.[53] A previous suicide attempt is the best predictor of future suicidal behavior; among attempters, 10% to 20% will ultimately die by suicide.[54] Without intervention, a failed suicide attempt may be followed by one that results in death.

SUICIDE MORTALITY

Few Oregon communities have not been touched by the tragedy of youth suicide. In fact, the risk is greatest where resources are often most limited. Like adults, teens living east of the Cascade Mountains are at greater risk of suicide than those living in western Oregon. Compared to 10- to 19-year-olds living in the non-coastal areas of western Oregon, those in the eastern two-thirds of the state were 37% more likely to commit suicide (Table 8 and Figure 11).

Most reported suicidal attempts by Oregon adolescents are made by overdosing with medications; about half of these attempts are made with analgesics, often acetaminophen (e.g., Tylenol).[53] Unfortunately, many youth are unaware of the potential long-term effects of drug overdoses (e.g., liver toxicity); in one study, 41% of high school students underestimated the potential lethality of acetaminophen, and 17% believed that one could not ingest enough of the drug to cause death.[55]

Figure 11. Suicide Death Rates for Oregon Youth Aged 10-19 Years, by Residence County, 1986-1996



Note: Some rates are based on a small number of events. Rates are per 100,000 10- to 19-year-olds.

CONTAGION

One risk factor that has been identified among adolescents is "contagion," a process by which exposure to suicidal behavior in one or more persons influences others to commit or attempt suicide. It can lead to clusters of suicides.[68] One important source of contagion is the news media; this does not mean, however, that media reporting of suicide should be curtailed. Rather, community efforts to address the suicide problem can be strengthened by news coverage that describes the help available in the community, explains how to identify persons at high risk of suicide, or presents information about risk factors for suicide.

"I think that there should always be someone that the teens trust becase teens always need someone to talk to about problems, if they aren't able to talk about their problems, it all just builds up inside and soon they will explode and eventually, they will end up being very depressed and that usually leads to teen suicide. The fact that they couldn't find some one that they could trust is very sad."

While 80% of non-fatal suicide attempts by Oregon's youth (under 18 years of age) during 1994-1996 involved ingestion of drugs, 68% of the attempts that resulted in death involved guns (See Appendix D).[56] Because of the high likelihood of death when guns are used, parents and others should restrict access to these highly lethal weapons among at-risk youth. When a gun is used, there is rarely a second chance. In only 30% of the homes of Oregonians where both guns and children are present are the guns stored unloaded and locked.[57] In another study, nearly one in four adolescents with a history of both substance abuse and suicide attempts lived with families who still kept a gun in the home.[58]

During the 1996-97 school year, 21% of all visits to state-supported school-based health centers were for mental health or mental health services, pointing to the need for on-site resources to service troubled youth.

Increased availability of firearms in the home is one of the most frequently cited findings associated with both the observed increased incidence of youth suicide and the increased use of firearms in suicides.[58] Between 1959-61 and 1992-94, the suicide by gun rate for Oregonians of all ages increased 4.3 times faster than did the rate for other methods.[8]

PREVENTION

"I think it would be neat if we could get a health center at our school."

The Oregon Health Division endorses the American Academy of Pediatrics intervention strategies for the prevention of youth suicide. These strategies focus on five general areas: (1) basic education about suicide directed to the general public through such avenues as high school classes and television programming, (2) screening programs to identify individuals at high risk for suicide, (3) training of health care and community providers who serve as gatekeepers for in-

"more kids are depressed & suicidal in this school then you people want to admit."

tervention services, (4) treatment programs for those who have attempted suicide, and (5) efforts to address firearm availability as a risk factor for suicide.[59] The data from the YRBS indicate that high school youth should have easy access to psychological services, regardless of their insurance status.[60]

"I think that our school and our community is living in fear of the parents. This is a small town which in our case means small minded conservative ideas and values. Parents think that they are hiding some thing from their kids or protecting them by not even metioning the subject identified in the survey, but in all actuality they are holding them behind and making the risk higher. If the parents had talked to them when they were in high school it could have cost them a lot less heart ache and pain. Wouldn't you think that they would want to give their kids a better life and talk withe them about thiese problems. Our parents are afraid to talk to us when little do they know that we really know a lot."

Adolescence is a time of change during which teens may experience confusion, pressure to succeed, stress, self-doubt, financial insecurity, and an unsupportive family. Sometimes these pressures lead to suicidal feelings and depression, but both are treatable disorders. Affected children and adolescents need to have their illness recognized, diagnosed, and treated.

During the 1997-98 school year, 39 schools had on-site school-based health centers to serve the medical needs of their students. Over one-fifth of all visits were for mental health care needs. Although thousands of students were treated, many more did not have access to school-based health centers. For additional information, see Appendix E.

Most people feel uncomfortable talking about suicide and death, particularly when it involves a child. However, asking a child whether he or she is depressed or thinking about suicide can be helpful. Rather than "putting thoughts in the child's head," such a question provides assurance that somebody cares and will listen.[61]

Ideally, suicidal feelings should be recognized and treated before an attempt is made. If they are not, and the youth survives the attempt, then direct intervention at the time of the acute event is required. This should include treatment that addresses holistically the often broad spectrum of interrelated risk factors leading to the act.

In 1997, the Oregon legislature, for the first time, provided funding for a Youth Suicide Prevention Coordinator position within the Health Division. Please call 503-731-4021 for consultation in developing prevention programs, giving presentations, and providing training in crisis management.

The epitaph of too many suicides has been, "We didn't know."

When a adolescent talks of suicide you should . . .

LISTEN:

- Don't act shocked. This will put distance between you.
- Encourage the child to talk to you or to some other trusted person.
- Allow expressions of feelings. Don't give advice or feel obligated to find simple solutions. Try to imagine how you would feel in the child's place.

BE HONEST AND DIRECT:

- Talk openly and matter-of-factly about suicide.
- If the child's words or actions scare you, tell him or her. If you're worried or don't know what to do, say so. Don't be a cheerful phony.
- Offer hope that alternatives are available but do not offer glib reassurance.

SHARE FEELINGS:

- At times everyone feels sad, hurt, or hopeless. You know what that's like; share your feelings. Accept the child's feelings. Let the child know he or she is not alone.
- Be non-judgmental. Don't debate whether suicide is right or wrong, or feelings are good or bad. Don't lecture on the value of life.
- Get involved. Become available. Show interest and support.

GET HELP:

- Don't be sworn to secrecy. Seek support.
- Professional help is crucial when something as serious as suicide is considered.
- Help may be found at a suicide prevention and crisis center, local mental health association, or from a family physician.
- Become familiar with the suicide prevention program at the child's school. Contact the appropriate person(s) at the school.
- Take action. Remove means, such as guns or stock-piled pills.[62]

APPENDIX A.

ACKNOWLEDGMENT OF PARTICIPATING SCHOOLS

Oregon's 1997 Youth Risk Behavior survey (YRBS) was coordinated by the Oregon Department of Human Resources' Health Division (Center for Health Statistics) and the Oregon Department of Education.

The Oregon Health Division and the Oregon Department of Education sincerely appreciate the superintendents, principals, teachers, counselors, and nurses who gave their time and energy to administer this survey. Thanks also go to the students at the following schools who participated in the survey. The Oregon Health Division and Oregon Department of Education are releasing YRBS data only on a statewide basis.

BAKER
Baker High School*

BENTON
Alsea High School
Corvallis High School
Crescent Valley High School
Monroe High School
Philomath High School

CLACKAMAS
Colton High School
Estacada High School
Gladstone High School
Lake Oswego High School
Lakeridge High School
Sandy High School

CLATSOP
Jewell High School
Seaside High School

COLUMBIA
Clatskanie High School
Knappa High School
Rainier High School
St Helens High School
Vernonia High School

COOS
Myrtle Point High School

CROOK
Crook County High School

CURRY
Gold Beach High School

DESCHUTES
Bend High School
LaPine High School
Marshall High School
Mountain View High School

DOUGLAS
Days Creek High School
North Douglas High School
Oakland High School
Reedsport High School
Roseburg High School*
South Umpqua High School
Yoncalla High School

GRANT
Dayville High School
Grant High School*
Prairie City High School

HARNEY
Burns High School

HOOD RIVER
Cascade Locks High School
Hood River High School

JACKSON
Ashland High School*
Crater High School*
North Medford High School
Phoenix High School
South Medford High School

JEFFERSON
Madras High School

JOSEPHINE
Illinois Valley High School*

KLAMATH
Klamath Union High School

LAKE
Paisley High School

LANE
Churchill High School
Junction City High
Mapleton High School
North Eugene High School*
South Eugene High School*

LINCOLN
Eddyville High School
Newport High School
Taft High School*
Toledo High School*
Waldport High School

LINN
Central Linn High School
Lebanon High School
South Albany High School

MARION
Cascade High School
Gervais High School
Jefferson High School
North Marion High School
Silverton High School
Woodburn High School

MORROW
Heppner High School
Ione High School
Riverside High School

MULTNOMAH
Centennial High School
Gresham High School
Jefferson High School*
Lincoln High School
Marshall High School*
Madison High School*
Parkrose High School
Roosevelt High School*
Sam Barlow High School
Wilson High School

TILLAMOOK
Neah-Kah-Nie High School
Nestucca High School
Tillamook High School

UMATILLA
Echo High School
McLoughlin High School
Pendleton High School*
Pilot Rock High School

UNION
Cove High School
Elgin High School
Union High School

WASCO
Petersburg High School
The Dalles High School
Wahtonka High School

WASHINGTON
Forest Grove High School

WHEELER
Mitchell High School

YAMHILL
Amity High School
Dayton High School
Sheridan High School
Willamina High School*

* Schools that have a School-based Health Center.

"I love our school based health clinic, without I would probably have gotten pregnant by now, they're life savers."

"I love my school based heath Center! It is easy to access, it is confidential, and I like the staff. Are you guys the ones who started this? if so THANK YOU!"

"It's not fair that your parrents have to sign a permission slip for you to use the teen health center. I would use it but my parrents would not sign the card."

APPENDIX B.

YRBS QUESTIONS INCLUDED IN THIS REPORT

2. What is your sex?
- a. Female
- b. Male

3. In what grade are you?
- a. 9th grade
- b. 10th grade
- c. 11th grade
- d. 12th grade
- e. Ungraded or other

4. How do you describe yourself?
- a. White - not Hispanic
- b. Black - not Hispanic
- c. Hispanic or Latino
- d. Asian or Pacific Islander
- e. American Indian or Alaskan Native
- f. Other

The next questions ask about safety and violence.

5. How often do you wear a seat belt when riding in a car driven by someone else?
- a. Never
- b. Rarely
- c. Sometimes
- d. Most of the time
- e. Always

11. During the past 30 days, how many times did *you* drive a car or other vehicle <u>when you had been drinking alcohol</u>?
- a. 0 times
- b. 1 time
- c. 2 or 3 times
- d. 4 or 5 times
- e. 6 or more times

13. During the past 30 days, on how many days did you carry a gun as a weapon <u>on school property</u>?
- a. 0 days
- b. 1 day
- c. 2 or 3 days
- d. 4 or 5 days
- e. 6 or more days

15. During the past 30 days, on how many days did you carry a weapon (other than a gun) such as a knife or club <u>on school property</u>?
- a. 0 days
- b. 1 day
- c. 2 or 3 days
- d. 4 or 5 days
- e. 6 or more days

17. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club <u>on school property</u>?
- a. 0 times
- b. 1 time
- c. 2 or 3 times
- d. 4 or 5 times
- e. 6 or 7 times
- f. 8 or 9 times
- g. 10 or 11 times
- h. 12 or more times

The next two questions ask about harassment at school. Harassment can include bullying; name calling or obscenities; offensive notes or graffiti; exclusion from groups; and unwanted attention or unwanted touching.

23. During the past 30 days have you been harassed at school by another student?
- a. Yes
- b. No
- c. Don't know

24. In the past 30 days, what were you harassed about? (If more than one reason, what was the most upsetting or offensive to you?)
- a. I was not harassed
- b. Race or national origin
- c. Unwanted sexual attention or comments
- d. Perceived sexual orientation (gay/lesbian/bisexual)
- e. Physical disability
- f. Other not listed
- g. Don't know why I was harassed

The following three questions are about physical abuse.

25. Have you ever been physically abused (hit, kicked or struck by someone when you were not involved in a fight)?
a. Yes
b. No
c. Don't know

26. If you have ever been physically abused, when was the last time this happened to you?
a. I have never been physically abused
b. Within the past week
c. Within the past month
d. Within the past year
e. Within the past 5 years
f. Over 5 years ago
g. Don't know

The next three questions are about sexual abuse.

28. Have you ever been sexually abused (For example: touched sexually when you did not want to be, or forced to have sexual intercourse when you did not want to)?
a. Yes
b. No
c. Don't know

29. If you have been sexually abused, when was the last time this happened?
a. I have never been sexually abused
b. Within the past week
c. Within the past month
d. Within the past year
e. Within the past 5 years
f. Over 5 years ago
g. Don't know

Sometimes people feel so depressed and hopeless about the future that they may consider attempting suicide, that is, taking some action to end their own life.

31. During the past 12 months, did you ever *seriously* consider attempting suicide?
a. Yes
b. No

32. During the past 12 months, how many times did you actually attempt suicide?
a. 0 times
b. 1 time
c. 2 or 3 times
d. 4 or 5 times
e. 6 or more times

33. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
a. I did not attempt suicide during the past 12 months
b. Yes
c. No

The next fourteen questions ask about tobacco use.

34. How old were you when you smoked a whole cigarette for the first time?
a. I have never smoked a whole cigarette
b. 8 years old or younger
c. 9 or 10 years old
d. 11 or 12 years old
e. 13 or 14 years old
f. 15 or 16 years old
g. 17 years old or more

36. During the past 30 days, on the days you smoked, how many cigarettes did you smoke <u>per day</u>?
a. I did not smoke cigarettes during the past 30 days
b. Less than 1 cigarette per day
c. 1 cigarette per day
d. 2 to 5 cigarettes per day
e. 6 to 10 cigarettes per day
f. 11 to 20 cigarettes per day
g. More than 20 cigarettes per day

43. Does someone living in your house (other than you) smoke cigarettes?
a. Nobody smokes
b. Someone smokes, but not inside the house
c. Someone smokes inside the house.

44. Do <u>you</u> think smoking is "cool"?
a. Yes
b. No

The next five questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

48. How old were you when you had your first drink of alcohol other than a few sips?
a. I have never had a drink of of alcohol other than a few sips
b. 8 years old or younger
c. 9 or 10 years old
d. 11 or 12 years old
e. 13 or 14 years old
f. 15 or 16 years old
g. 17 years old or older

50. During the past 30 days, on how many days did you have at least one drink of alcohol?
a. 0 days
b. 1 or 2 days
c. 3 to 5 days
d. 6 to 9 days
e. 10 to 19 days
f. 20 to 29 days
g. All 30 days

51. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
a. 0 days
b. 1 day
c. 2 days
d. 3 to 5 days
e. 6 or 9 days
f. 10 to 19 days
g. 20 or more days

The next four questions ask about the use of marijuana, which is also called grass or pot.

55. During the past 30 days, how many times did you use marijuana?
a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

The next nine questions ask about cocaine and other drug use.

59. During the past 30 days, how many times have you used any form of cocaine, including powder, crack, or freebase?
a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

61. During the past 30 days, how many times have you sniffed glue, or breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

63. During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?
a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

64. During your life, how many times have you used a needle to inject any illegal drug into your body?
a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

The next sixteen questions ask about sexual behavior.

72. During your life, with how many people have you had sexual intercourse?
a. I have never had sexual intercourse
b. 1 person
c. 2 people
d. 3 people
e. 4 people
f. 5 people
g. 6 or more people

73. During the past 3 months, with how many people did you have sexual intercourse?
- a. I have never had sexual intercourse
- b. I have had sexual intercourse, but not during the past 3 months
- c. 1 person
- d. 2 people
- e. 3 people
- f. 4 people
- g. 5 people
- h. 6 or more people

77. How many times have you been pregnant or gotten someone pregnant?
- a. 0 times
- b. 1 time
- c. 2 or more times
- d. Not sure

The next six questions ask about body weight.

89. How do you describe your weight?
- a. Very underweight
- b. Slightly underweight
- c. About the right weight
- d. Slightly overweight
- e. Very overweight

93. During the past 30 days, did you <u>vomit or take laxatives</u> to lose weight or to keep from gaining weight?
- a. Yes
- b. No

"In the survey, I think depression should be discussed, I have found that most of the people I know have experienced it in one form or another, including myself. All problems (such as the ones discussed) have roots, and the roots are the actual disease. Alcoholism, anorexia, etc. are merely the side-effects. I have found that school counseloers really don't do much, besides plan peer groups and other events of the sort."

The last questions ask about health care and community resources.

104. During the past 12 months, did you have any of the following health care needs? (On your answer sheet MARK ALL THAT APPLY.)
- a. Check-up or sports physical
- b. Injury or accident
- c. Illness
- d. Immunization
- e. Reproductive health services (exam or birth control/condoms)
- f. Pregnancy test or sexually transmitted disease test
- g. Alcohol or other drug problem
- h. Personal or emotional problem
- i. Other need not listed
- j. I had no health care needs

110. When you are scared, worried, or concerned about yourself or your friends, is there a caring adult you can talk to?
- a. No, there is no adult
- b. Yes, 1 adult
- c. Yes, 2 or 3 adults
- d. Yes, 4 or more adults

"These test are a biased attempt to separated and control the weary youth of society, who are just fighting to swim in this dunking tank of stress"

"Through taking this survey I have realized that alot of my friends, acquaintances in my environment, & myself have mental disorders, drug problems, eating disorders, & etc. This survey showed me that this world is awful. I'm proud of myself for staying together and Sticking through it all."

APPENDIX C.

RISKY BEHAVIOR AND THE HOME ENVIRONMENT

Although some suicidal youth come from loving supportive families, more often the absence of a nurturing environment puts adolescents at increased risk of self-destructive behavior.[58]

Many suicidal children experience difficulties with their families that leads them to doubt their self-worth, resulting in their feeling unwanted, misunderstood, and unloved. Too often parents and other adults criticize the child instead of the behavior.[32]

"Survey—ask about family life—that's where most problems begin—lots of teen's parents are drunk everyday of their life—mine are—that's where my probs are—we fight everyday because my dad is constantly drunk."

Low and Andrews summarized the studies of families whose children were suicidal: "Families of suicidal adolescents have been characterized as chronically disorganized, chaotic and unstable with higher prevalences of family breakup, violence and suicidal tendencies . . . Parents of suicidal adolescents have shown a greater prevalence of drug and alcohol abuse, chronic psychiatric illness, especially affective disorders . . . Suicidal adolescents have also experienced a higher incidence of physical and sexual abuse in their families." They further noted that "interactions among families of suicidal children and adolescents have shown that high levels of hostility, rejection, and disapproval are directed towards the suicidal youth, with concurrent withdrawal of support, leaving adolescent children feeling 'expendable' to the family."[63]

Four questions in the YRBS provide insight into the student's home environment. One, cigarette smoking in the household, is probably a surrogate measure for other factors (e.g., parental income and education). Three other questions relate to the home environment and level of social support available from adults: physical abuse, sexual abuse,[64] and the number of adults that the student can go to to discuss problems. The presence of these four risk factors is strongly related to a spectrum of risky behaviors, including suicidal behavior (Table C-1).

"Many of my friends suffer from either depression, family problems, or other problems. We do not feel that there is anywhere to go for counseling or other treatment without tellin our parents, for fear of rising more problems. I think that in our school, Counselors should be more available without concent of parents."

Not surprisingly, the poorer the student's environment and life experiences, the greater the likelihood that he or she engaged in self-destructive behavior. Students who: a) lived

"It all starts in the home, not in the school."

in a home exposed to second-hand tobacco smoke, b) who had no caring adults they could go to for advice, and c) who had been both sexually and physically abused were *24 times* more likely to attempt suicide than were those who lived in a smoke-free house, had at least two adults they could talk to, and who had not been sexually or physically abused. For five of the characteristics shown in Table C-1, the odds of an adolescent engaging in risky behavior were *48 or more times* greater for those in the poorest environment compared to those in the more favorable environment: 1) treatment for a suicide attempt was reported 48 times more frequently; 2) heavy cocaine use was 49 times more common; 3) binge drinking was 62 times more prevalent; 4) both heavy cigarette smoking and 5) multiple pregnancies were reported more than 100 times more often (Figure C-1).

"I smoke crack and Nobody cares for Me!"

"Because my life is my life, It is the only one I have, and will ever have because I am not a superstitious . . . who is scared to die. Let me be sad, let me not care"

Figure C-1. Odds of Engaging in Suicidal and Other Risky Behavior, Oregon High School Students in Undesirable Environments, 1997

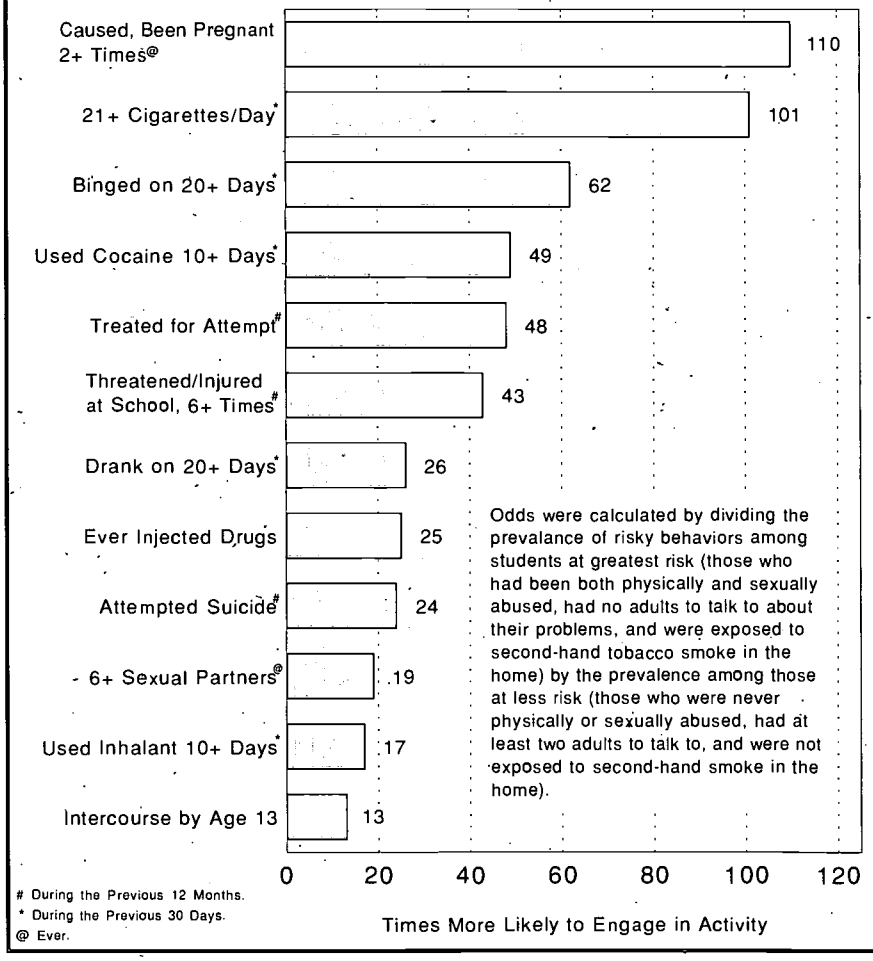


TABLE C-1.
Frequency of Risky Behaviors by Type of Environment, Oregon Youth Risk Behavior Survey, 1997[1]

Sample and Estimated Number of Students	A[2]	Inter-mediate	Ω[3]	
Number in sample	7,790	24,435	153	
Percent of sample	24.1	75.5	0.5	
Estimated # of Oregon students	34,233	107,380	672	
Characteristics	Percentage Engaging in Behavior			Odds Ratio (Ω/A)
Considered suicide	9.4	25.9	72.8	7.7
Attempted suicide	2.0	10.4	48.8	24.4
Treated for attempt	0.4	2.8	19.1	47.8
Very underweight	1.1	2.6	9.7	8.8
Very overweight	2.1	3.8	5.8	2.8
Vomited or used laxatives[4,5]	2.3	6.2	20.6	9.0
Threatened or injured 6+ times[6]	0.2	6.7	8.5	42.5
Carried a weapon to school[4]	10.2	19.6	32.0	3.1
Carried a gun to school[4]	2.9	6.4	18.1	6.2
Think smoking is cool	4.2	7.8	19.5	4.6
Smoke more than 20 cigarettes/day[4]	0.1	0.7	10.6	100.6
Smoked before age 11	3.6	11.1	32.4	9.0
Drank alcohol 20+ of days[4]	0.4	1.8	10.2	25.5
Binge drank on 20+ days [4]	0.1	0.6	6.2	62.0
Drank alcohol before age 11	8.3	19.4	43.8	5.3
Smoked marijuana 10+ times[4]	2.6	10.4	25.4	9.8
Used cocaine 10+ times[4]	0.1	0.5	4.9	49.0
Sniffed inhalants 10+ times[4]	0.2	0.6	3.4	17.0
Ever injected drugs	0.4	0.7	10.0	25.0
Emotional problems	3.3	6.6	16.0	4.8
Had intercourse before age 13	1.6	5.8	21.4	13.4
6+ sex partners	1.5	6.0	28.1	18.7
Pregnant (or caused pregnancy) 2+ times	0.1	0.9	11.0	110.0

1. Based on 32,378 surveys from 102 high schools.
2. The student had at least two adults he or she could go to for support, had not been physically or sexually abused, and no one smoked inside the home.
3. The student had no adults he or she could go to for support, had been both physically and sexually abused, and was exposed to environmental tobacco smoke in the home.
4. During the prior 30 days.
5. To control weight.
6. During the prior year.

APPENDIX D.

SUICIDE ATTEMPTS AND DEATHS, 1994-1996

In response to elevated suicide rates in the state, the Oregon legislature in 1987 mandated that Oregon hospitals treating a child 17 or younger for injuries resulting from a suicide attempt report the attempt to the Oregon Health Division. Notification to the Adolescent Suicide Attempt Data System (ASADS) is made via a one-page attempt report form, usually completed by emergency department or medical records personnel. The law also requires that the patient be referred for counseling.

Guns are used in more fatal suicide attempts than all other methods combined.

During 1994-1996, 2,304 non-fatal suicide attempts were reported for Oregonians 17 or younger, 500 males and 1804 females. The youngest attempter was an 8-year-old boy. During the same time, 71 youth aged 10-17 made a suicide attempt that resulted in death, 51 males and 20 females. The youngest were two 10-year-old boys.

TABLE D-1. Fatal and Non-fatal Attempts by Method of Attempt, Oregonians Aged 17 or Less, 1994-1996

Method	Number of All Attempts	% of Non-fatal Attempts	% That Were Fatal	% of Fatal Attempts
Poisoning[1]	1,838	79.7	0.1	1.4
Carbon Monoxide	5	0.2	0.0	0.0
Hanging	113	4.2	15.0	23.9
Drowning	0	0.0	0.0	0.0
Firearms	57	0.4	84.2	67.6
Cutting	193	8.3	1.0	2.8
Jumping[2]	8	0.3	12.5	1.4
Other & N.S.	161	6.9	1.2	2.8
Total	2,375	100.0	3.0	100.0

1. Includes medications, solids, and liquids.
2. From a high place.

"Dont worry about us because we are going to die off any way Dude!"

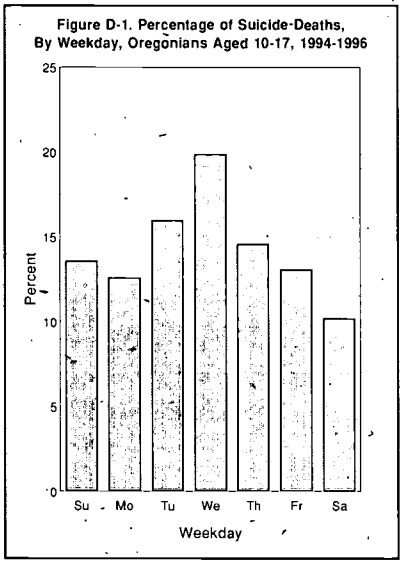
TABLE D-2. Time of Day of Fatal Attempts, Oregonians Aged 17 or Less, 1994-1996

Time	% of Attempts
3:00 AM - 6:00 AM	10
7:00 AM - 10:00 AM	6
11:00 AM - 2:00 PM	13
3:00 PM - 6:00 PM	32
7:00 PM - 10:00 PM	24
11:00 PM - 2:00 AM	15

Although females were much more likely than males to make an attempt, just 1.1% of their attempts were fatal. By comparison, 9.3% of those by males ended in death, reflecting their more frequent use of lethal methods.[65] Although youth less than 15 years of age were less likely to make an attempt than were those 15 to 17, (832 vs. 1,472 attempts), their attempts were nearly as likely to result in death (2.5% compared to 3.3% of the older teens). Overall, 3.0% of the attempts were fatal.

The most common attempt methods rarely resulted in death (Table D-1). Just 0.1% of the overdoses and 1.0% of the lacerations were fatal. Conversely, 84% of the gunshot wounds ended in death as did 15% of the hangings. These methods were used by just 7.2% of the attempters. Most fatalities resulted from gunshot wounds (68%) and hanging (24%).

Figure D-1. Percentage of Suicide-Deaths, By Weekday, Oregonians Aged 10-17, 1994-1996



Unlike adults, who most often commit suicide during January, youth (younger than 18) most often killed themselves during September, the beginning of the school year.[8,66] While one-twelfth of the deaths would be expected to occur during September, proportionately half-again as many were recorded (8.3% vs. 12.6%). School-aged youth were least likely to commit suicide during the summer months; the average monthly proportion was 5.2%, less than half that seen at the beginning of the school year.

Also unlike adults, who most often committed suicide at the beginning of the work week, adolescents under 18 years of age most often killed themselves midweek (Figure D-1). They were also more likely to end their lives after school, whereas adults more often did so at the beginning of the work day (Table D-2). Most (85%) of the fatal attempts were made in the adolescent's own home or another's home.

A suicide attempt may be triggered by a variety of personal crises. The ASADS report form allows one or more events leading to the attempt to be recorded. Table D-3 lists the most common reasons in rank order. For additional information from the ASADS, see the *Oregon Vital Statistics Annual Report,* Volume 2.

TABLE D-3.
REASONS GIVEN FOR SUICIDE ATTEMPTS, BY AGE AND SEX, OREGONIANS LESS THAN 18 YEARS OLD, 1996

REASONS	TOTAL	SEX		AGE		
		MALE	FEMALE	<=12	13-14	15-17
TOTAL						
NUMBER	681	133	548	45	180	456
PERCENT	100.0	100.0	100.0	100.0	100.0	100.0
FAMILY DISCORD						
NUMBER	360	63	297	32	101	227
PERCENT	52.9	47.4	54.2	71.1	56.1	49.8
ARGUMENT WITH BOY/GIRLFRIEND						
NUMBER	185	32	153	4	40	141
PERCENT	27.2	24.1	27.9	8.9	22.2	30.9
SCHOOL-RELATED PROBLEMS						
NUMBER	130	29	101	13	32	85
PERCENT	19.1	21.8	18.4	28.9	17.8	18.6
RAPE OR SEXUAL ABUSE						
NUMBER	61	7	54	6	17	38
PERCENT	9.0	5.3	9.9	13.3	9.4	8.3
SUBSTANCE ABUSE						
NUMBER	52	19	33	2	15	35
PERCENT	7.6	14.3	6.0	4.4	8.3	7.7
PROBLEMS WITH THE LAW						
NUMBER	52	17	35	3	7	42
PERCENT	7.6	12.8	6.4	6.7	3.9	9.2
DEATH OF FAMILY MEMBER/FRIEND						
NUMBER	37	5	32	1	16	20
PERCENT	5.4	3.8	5.8	2.2	8.9	4.4
MOVE OR NEW SCHOOL						
NUMBER	34	9	25	4	14	16
PERCENT	5	6.8	4.6	8.9	7.8	3.5
PEER PRESSURE/CONFLICT						
NUMBER	29	9	20	3	7	19
PERCENT	4.3	6.8	3.6	6.7	3.9	4.2
PHYSICAL ABUSE						
NUMBER	20	7	13	5	4	11
PERCENT	2.9	5.3	2.4	11.1	2.2	2.4
SUICIDE BY FRIEND/RELATIVE						
NUMBER	14	2	12	1	5	8
PERCENT	2.1	1.5	2.2	2.2	2.8	1.8
PREGNANCY						
NUMBER	8	1	7	-	1	7
PERCENT	1.2	0.8	1.3	-	0.6	1.5
OTHER REASONS						
NUMBER	149	30	119	12	46	91
PERCENT	21.9	22.6	21.7	26.7	25.6	20.0

NOTE: Reports with unknown reasons for suicide attempts are not included in this table.
Percentages do not total 100 because more than one reason may have been given.
The category "suicide by friend/relative" includes suicide attempts.

APPENDIX E.

SCHOOL-BASED HEALTH CENTERS

School-based health centers are clinics located on a school campus staffed by qualified health care professionals such as nurse practitioners, physician assistants, and community health nurses.[67] Some centers also have social workers, dietitians, substance abuse counselors, and other professionals trained to meet the health care needs of children and adolescents. An advisory board, composed of parents, teachers, students, health professionals, community leaders, and religious leaders, develops and reviews the policies of each center. During the 1997-98 school year, students at 39 Oregon schools were served by school-based health centers.

"I think that this is an excellent school, but I believe strongly that it needs a school based health center. I'm a junior and this is my first year here. When I attended my previous school we had a health center and it was a great asset. We have many people who are pregnant and suffering and many who are very unprepared to deal with the challenges of teenage life. A health center would be very beneficial."

Comprehensive primary health care services ranging from acute illness care to mental health counseling are available to all students in the school. The health centers work closely with the educational system to provide developmentally and age-appropriate care and advice. Consent for a student to utilize the health center is based on several factors, including Oregon minor consent laws, type of service, and local school policies.

School-age children and youth are at risk for a variety of health problems such as poor nutrition, substance abuse, emotional problems, unplanned pregnancy, sexually transmitted disease, violence, and suicide. By age 15, one-fourth of all adolescents are engaged in risky behaviors (e.g., smoking, substance abuse, or unprotected sex). Many students who are at risk of engaging in dangerous and health-compromising behaviors come to the health centers because of their convenience, reputation, and cost; services at a school-based health center are free and confidential. Over 60 percent of all students use school-based health centers, when they are present in their schools, and as many as 28 percent of students who use the centers have no other access to health care.

"There is too much emphasis put on the idea that it is the school's fault there are so many problems with kids today. The blame should be placed on our decomposing family structure."

Health promotion is an integral part of all health services. Students are taught to become aware of how their behavior affects their health, as well as the role of personal responsibility in maintaining good health. Health promotion and early

"This shool need more programs of education no only alcohol or AIDS programs sphycologic some body need help for problems with father and mother"

"we Need more money in schooLs To have a cLass in speLLing or some thng Like That."

intervention in health-compromising behaviors or practices are as salient to a student's visit as is the treatment of the presenting problem or condition.

School-based health centers work closely with parents, school faculty, and staff in early identification and care of abnormal behaviors or indicators of personal problems. The clinics offer a variety of mental health services for students including: counseling (e.g., for eating disorders, substance abuse, relationship problems, and anger management); support groups; and, referrals to community health care specialists when necessary. Mental and emotional health services play a vital role in detecting mental disorders and diseases that could prevent the student from performing satisfactorily in school. Most health centers offer support groups that involve and benefit both the student and family.

For additional information about school-based health clinics call (503) 731-4771.

REFERENCES AND ENDNOTES

1. The number of suicides may be larger; medical examiners were unable to determine whether the death was intentional or unintentional for ten 10- to 19-year-olds. In addition, some suicides committed by crashing a motor vehicle may not be recognized; an estimated 1.6% to 5.0% of vehicular fatalities are believed to be suicides that escaped detection. (Peck DL, Warner K. Accident or suicide? Single-vehicle car accidents and the intent hypothesis. Adolescence. 1995. 30:463-472; Schmidt CW, et. al. Suicide by vehicular crash. Am J Psych. 1977; 134:175-178).
2. During 1994-1996, unintentional injuries claimed 360 10- to 19-year-olds; 247 of these resulted from motor vehicle crashes.
3. These rates are based on relatively few events and therefore are subject to considerable random statistical variation.
4. Personal communication. There has been no change in how suicides are classified over the past several decades. Karen Gunson, MD, Oregon Deputy State Medical Examiner.
5. These data are based on the CDC's WONDER (Wide-ranging On-line Data for Epidemiological Research) system. Because the National Center for Health Statistics (NCHS) does not include updated cause of death data available to the Oregon Center for Health Statistics (OCHS), the Oregon rate in WONDER is under-stated: the WONDER-based suicide rate for Oregon 15- to 19-year-olds was 13.0 per 100,000 population versus 14.9 recorded by the OCHS. The national suicide rate for this age group was 10.8. If OCHS data were compared to NCHS data, the Oregon rate would be 38% higher than the nation's and 13th highest among the states.
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20. Responses to the physical abuse question were missing or invalid for 22 percent of the cases, by far the highest for any of the survey questions; therefore, these data should be used with caution. Responses to the sexual abuse question were missing for 10 percent of the cases, the third highest value recorded for the survey questions discussed herein.
21. Nine percent of students reported being both physically and sexually abused.
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23. Three percent of males and 14% of females reported being both physically and sexually abused. Just 73% of males and 61% of females reported neither type of abuse. For both sexes combined, the figure was 67%.
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29. In 37% of all households with a high school student, someone smoked, 19% in the home and an additional 18% outside the home.
30. Females were four times more likely to use extreme measures for weight control (8% vs. 2% of males). However, both genders using these weight control measures were three and one-half times more likely to attempt suicide than were their peers who abstained from these methods.
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65. These percentages, and others showing the percentage of attempts resulting in death, represent maximum values because an unknown number of attempts may have been unreported.
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